

Trying 3106016892...Open

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PASSWORD:  
TERMINAL (ENTER 1, 2, 3, OR ?):2
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* * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Dec 17 The CA Lexicon available in the CAPLUS and CA files
NEWS 3 Feb 06 Engineering Information Encompass files have new names
NEWS 4 Feb 16 TOXLINE no longer being updated
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7 May 07 DGENE Reload
NEWS 8 Jun 20 Published patent applications (A1) are now in USPATFULL
NEWS 9 JUL 13 New SDI alert frequency now available in Derwent's DWPI and DPCI
NEWS 10 Aug 23 In-process records and more frequent updates now in MEDLINE
NEWS 11 Aug 23 PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
NEWS 12 Aug 23 Adis Newsletters (ADISNEWS) now available on STN
NEWS 13 Sep 17 IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 14 Oct 09 Korean abstracts now included in Derwent World Patents Index
NEWS 15 Oct 09 Number of Derwent World Patents Index updates increased
NEWS 16 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 17 Oct 22 Over 1 million reactions added to CASREACT
NEWS 18 Oct 22 DGENE GETSIM has been improved
NEWS 19 Oct 29 AAASD no longer available
NEWS 20 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 21 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 22 Nov 29 COPPERLIT now available on STN
NEWS 23 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 24 Nov 30 Files VETU and VETB to have open access
NEWS 25 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 26 Dec 10 DGENE BLAST Homology Search
NEWS 27 Dec 17 WELDASEARCH now available on STN
NEWS 28 Dec 17 STANDARDS now available on STN
NEWS 29 Dec 17 New fields for DPCI
NEWS 30 Dec 19 CAS Roles modified
NEWS 31 Dec 19 1907-1946 data and page images added to CA and CApplus

NEWS EXPRESS August 15 CURRENT WINDOWS VERSION IS V6.0c,
CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),
AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001

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NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 10:39:29 ON 11 JAN 2002

=> file registry

FILE 'REGISTRY' ENTERED AT 10:39:37 ON 11 JAN 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2
DICTIONARY FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

Uploading dithio.str

L1 STRUCTURE uploaded

=> s 11

SAMPLE SEARCH INITIATED 10:40:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 327 TO ITERATE

100.0% PROCESSED 327 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

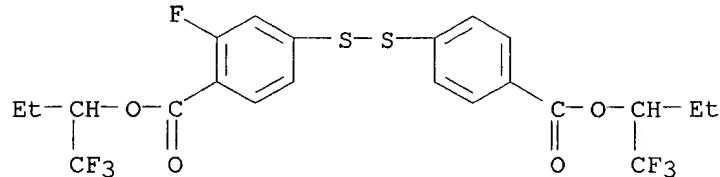
PROJECTED ITERATIONS: 5456 TO 7624
PROJECTED ANSWERS: 4088 TO 5992

L2 50 SEA SSS SAM L1

=> d 12

L2 ANSWER 1 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 377778-32-0 REGISTRY

CN Benzoic acid,
 2-fluoro-4-[[4-[[1-(trifluoromethyl)propoxy]carbonyl]phenyl]
 dithio]-, 1-(trifluoromethyl)propyl ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C22 H19 F7 O4 S2
 SR CA
 LC STN Files: CA, CAPLUS

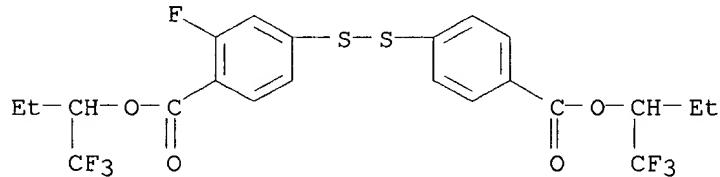


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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L2 ANSWER 1 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 377778-32-0 REGISTRY
 CN Benzoic acid,
 2-fluoro-4-[[4-[[1-(trifluoromethyl)propoxy]carbonyl]phenyl]
 dithio]-, 1-(trifluoromethyl)propyl ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C22 H19 F7 O4 S2
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 LC STN Files: CA, CAPLUS



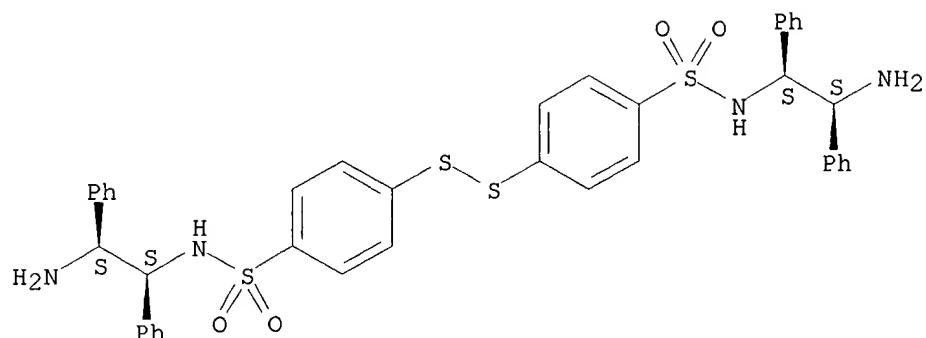
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 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 2 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 357611-98-4 REGISTRY
 CN Benzenesulfonamide, 4,4'-dithiobis[N-[(1S,2S)-2-amino-1,2-diphenylethyl]-
 (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C40 H38 N4 O4 S4
 SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

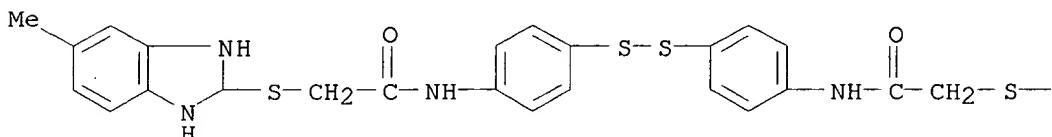


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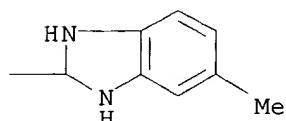
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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 3 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 348141-37-7 REGISTRY
CN Acetamide, N,N'-(dithiodi-4,1-phenylene)bis[2-[(2,3-dihydro-5-methyl-1H-benzimidazol-2-yl)thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H32 N6 O2 S4
SR Chemical Library
LC STN Files: CHEMCATS

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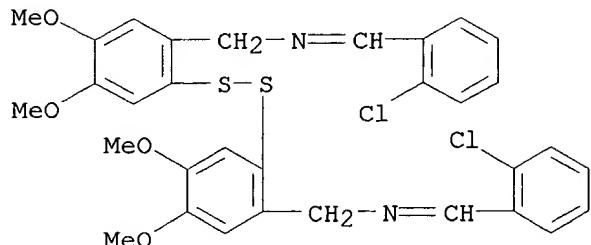
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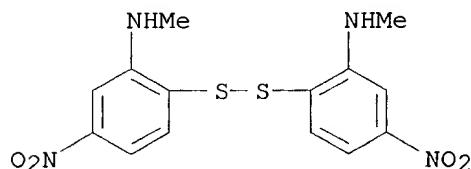
L2 ANSWER 4 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 344767-88-0 REGISTRY
CN Benzenemethanamine, 2,2'-dithiobis[N-[(2-chlorophenyl)methylene]-4,5-

dimethoxy- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H30 Cl2 N2 O4 S2
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

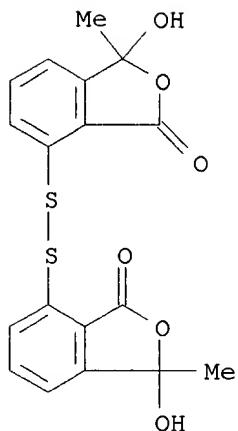
L2 ANSWER 5 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 341551-73-3 REGISTRY
CN Benzenamine, 2,2'-dithiobis[N-methyl-5-nitro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H14 N4 O4 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 6 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 335279-65-7 REGISTRY
CN 1(3H)-Isobenzofuranone, 7,7'-dithiobis[3-hydroxy-3-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H14 O6 S2
SR CA
LC STN Files: CA, CAPLUS, TOXLIT



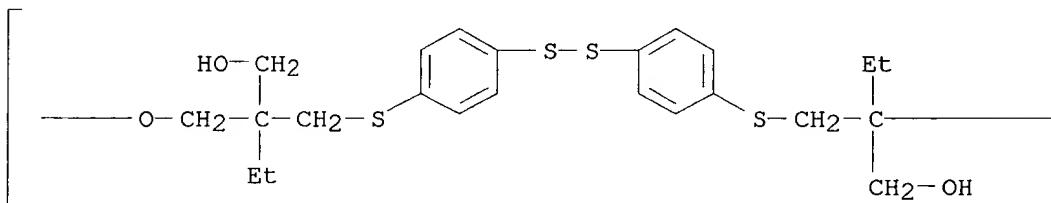
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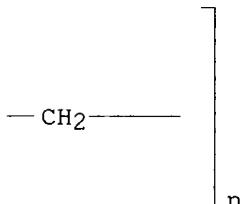
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 7 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 329364-11-6 REGISTRY
 CN Poly[oxy[2-ethyl-2-(hydroxymethyl)-1,3-propanediyl]thio-1,4-phenylenedithio-1,4-phenylenethio[2-ethyl-2-(hydroxymethyl)-1,3-propanediyl]] (9CI) (CA INDEX NAME)
 MF (C₂₄ H₃₂ O₃ S₄)_n
 CI PMS
 PCT Polyether, Polysulfide, Polythioether
 SR CA
 LC STN Files: CA, CAPLUS

PAGE 1-A

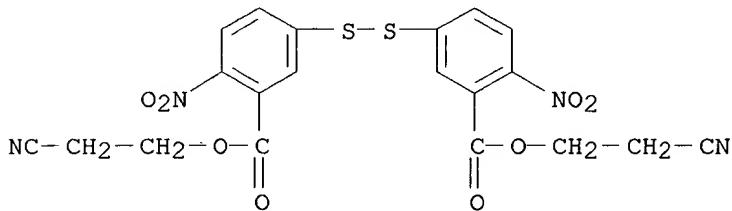


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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

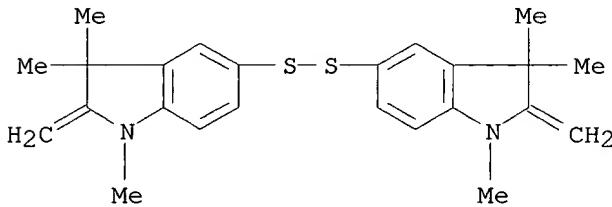
L2 ANSWER 8 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 313056-27-8 REGISTRY
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FS 3D CONCORD
MF C20 H14 N4 O8 S2
SR CA
LC STN Files: CA, CAPLUS, TOXLIT, USPATFULL



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3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

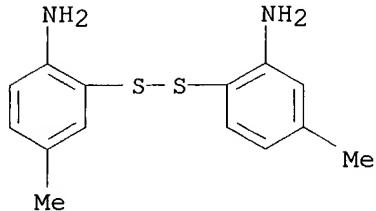
L2 ANSWER 9 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 306735-90-0 REGISTRY
CN 1H-Indole, 5,5'-dithiobis[2,3-dihydro-1,3,3-trimethyl-2-methylene- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C₂₄ H₂₈ N₂ S₂
SR Chemical Library
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

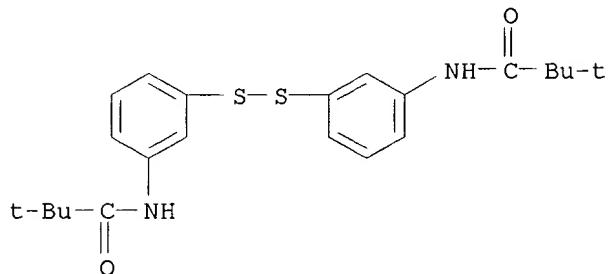
L2 ANSWER 10 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 304660-58-0 REGISTRY
CN Benzenamine, 2-[(2-amino-4-methylphenyl)dithio]-4-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD

MF C14 H16 N2 S2
SR Chemical Library
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 ANSWER 11 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 303054-96-8 REGISTRY
CN Propanamide, N,N'-(dithiodi-3,1-phenylene)bis[2,2-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C22 H28 N2 O2 S2
SR CA
LC STN Files: CA, CAPLUS

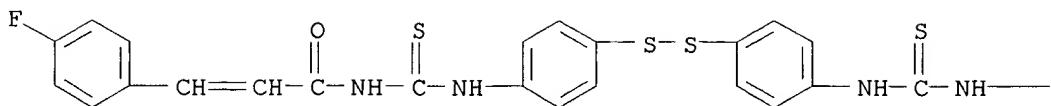


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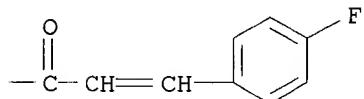
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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 12 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 294651-35-7 REGISTRY
CN 2-Propenamide, N,N'-[dithiobis(4,1-phenyleneiminocarbonothioyl)]bis[3-(4-fluorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H24 F2 N4 O2 S4
SR Chemical Library
LC STN Files: CHEMCATS

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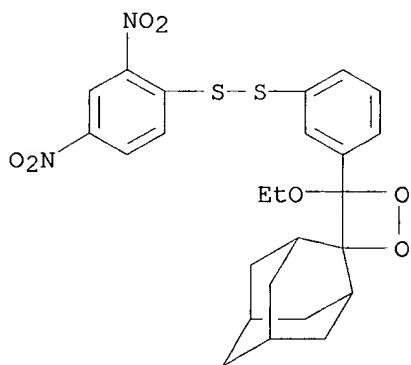


PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 ANSWER 13 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 287171-81-7 REGISTRY
CN Spiro[1,2-dioxetane-3,2'-tricyclo[3.3.1.13,7]decane], 4-[3-[(2,4-dinitrophenyl)dithio]phenyl]-4-ethoxy- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H26 N2 O7 S2
SR CA
LC STN Files: CA, CAPLUS, CASREACT

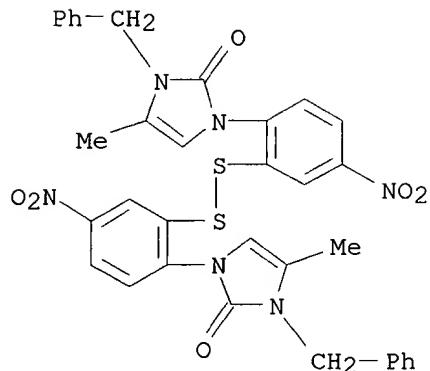


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 14 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 279688-00-5 REGISTRY
CN 2H-Imidazol-2-one,
1,1'-(dithiobis(4-nitro-2,1-phenylene))bis[1,3-dihydro-4-methyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H28 N6 O6 S2
SR CA

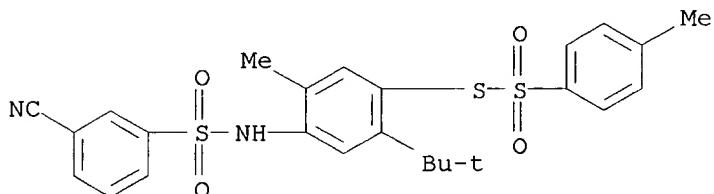
LC STN Files: CA, CAPLUS, CASREACT



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 15 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 263843-13-6 REGISTRY
CN Benzenesulfonothioic acid, 4-methyl-, S-[4-[(3-cyanophenyl)sulfonyl]amino]-2-(1,1-dimethylethyl)-5-methylphenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H26 N2 O4 S3
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

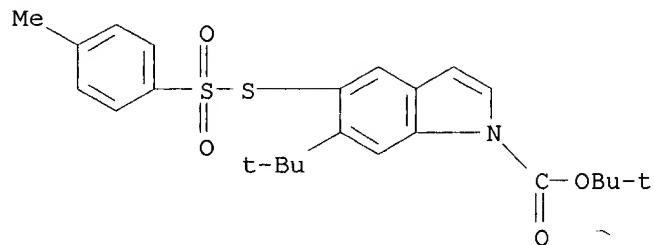


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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 16 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 261709-56-2 REGISTRY
CN 1H-Indole-1-carboxylic acid, 6-(1,1-dimethylethyl)-5-[(4-methylphenyl)sulfonyl]thio-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H29 N O4 S2
SR CA

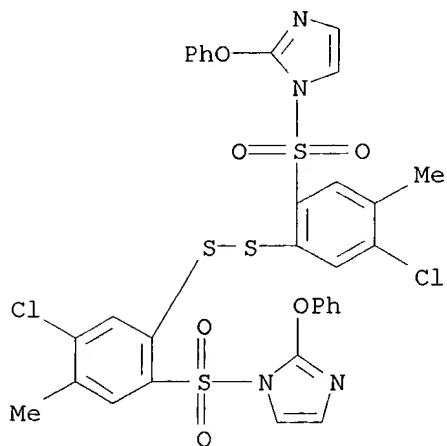
LC STN Files: CA, CAPLUS, TOXCENTER



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2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 17 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 256513-63-0 REGISTRY
CN 1H-Imidazole, 1,1'-(dithiobis[(4-chloro-5-methyl-2,1-phenylene)sulfonyl])bis[2-phenoxy- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H24 Cl2 N4 O6 S4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

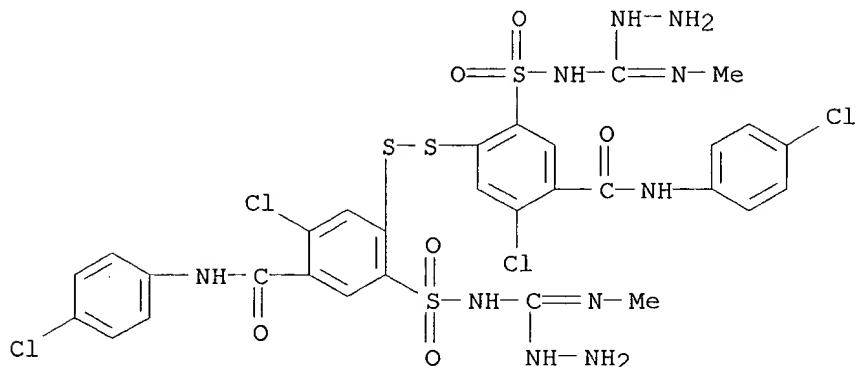


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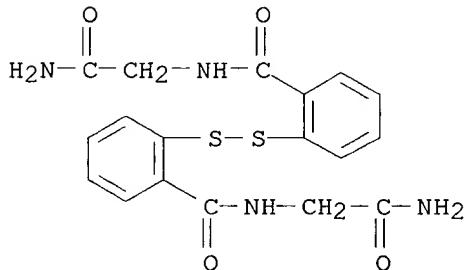
L2 ANSWER 18 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 256513-21-0 REGISTRY
CN Benzamide, 4,4'-dithiobis[2-chloro-N-(4-chlorophenyl)-5-[[hydrazino(methylamino)methylene]amino]sulfonyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD
 MF C30 H28 Cl4 N10 O6 S4
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER



1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 19 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 252898-12-7 REGISTRY
 CN Benzamide, 2,2'-dithiobis[N-(2-amino-2-oxoethyl)- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C18 H18 N4 O4 S2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

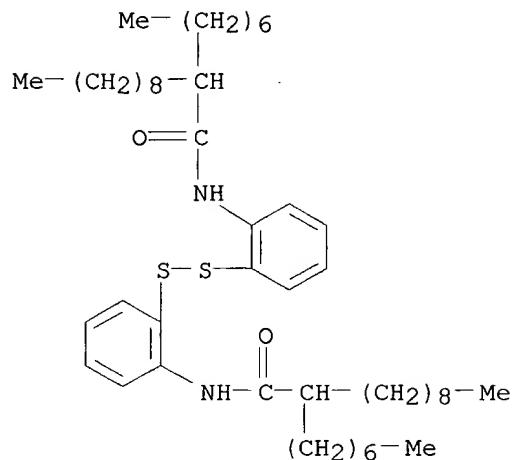


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1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 20 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 244779-62-2 REGISTRY
 CN Undecanamide, N,N'-(dithiodi-2,1-phenylene)bis[2-heptyl- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C48 H80 N2 O2 S2
 SR CA

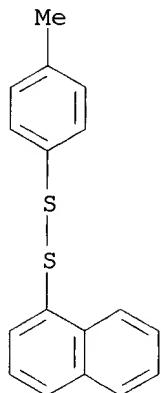
LC STN Files: CA, CAPLUS



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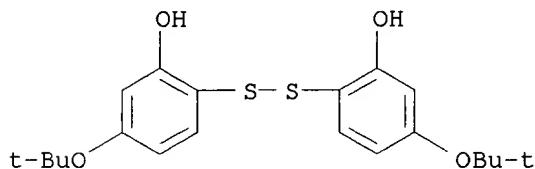
L2 ANSWER 21 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 243124-46-1 REGISTRY
CN Disulfide, 4-methylphenyl 1-naphthalenyl (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H14 S2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 22 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 225663-68-3 REGISTRY
CN Phenol, 2,2'-dithiobis[5-(1,1-dimethylethoxy)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H26 O4 S2
SR CA
LC STN Files: CA, CAPLUS

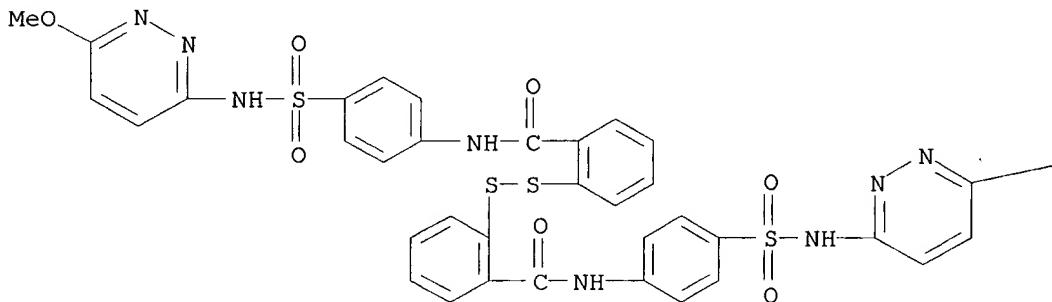


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1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 23 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 221119-65-9 REGISTRY
CN Benzamide, 2,2'-dithiobis[N-[4-[[[6-methoxy-3-pyridazinyl)amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H30 N8 O8 S4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL

PAGE 1-A



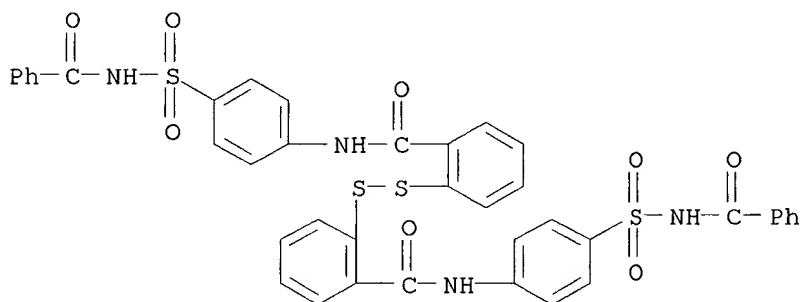
PAGE 1-B

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 24 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 221119-57-9 REGISTRY
CN Benzamide, 2,2'-dithiobis[N-[4-[(benzoylamino)sulfonyl]phenyl]- (9CI)
(CA
INDEX NAME)
FS 3D CONCORD
MF C40 H30 N4 O8 S4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL



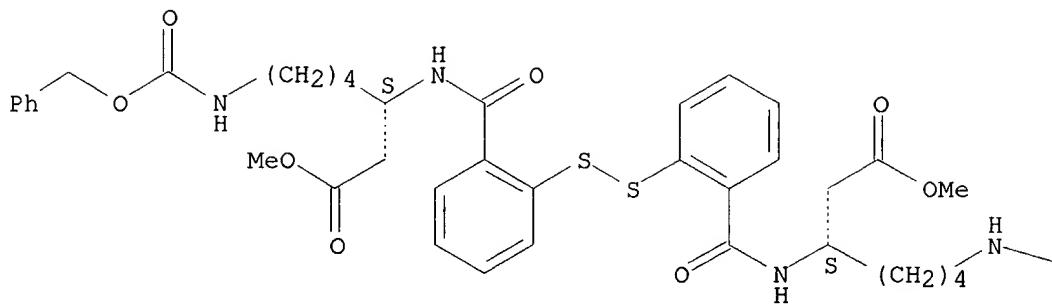
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2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

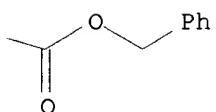
L2 ANSWER 25 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 219309-94-1 REGISTRY
CN Heptanoic acid, 3,3'-(dithiobis(2,1-phenylene carbonylimino))bis[7-[(phenylmethoxy)carbonyl]amino]-, dimethyl ester, (3S,3'S)- (9CI) (CA
INDEX NAME)
FS STEREOSEARCH
MF C46 H54 N4 O10 S2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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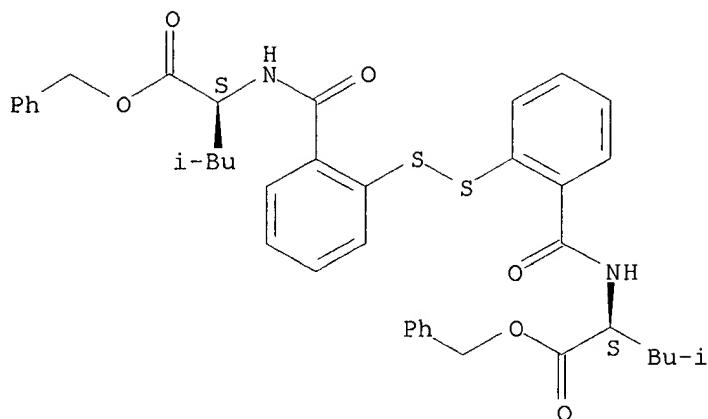


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1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 26 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 219309-71-4 REGISTRY
CN L-Leucine, N,N'-[dithiobis(2,1-phenylene carbonyl)]bis-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C40 H44 N2 O6 S2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

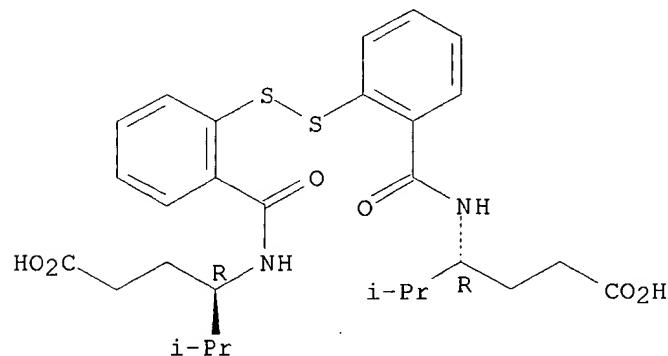


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 27 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 219309-56-5 REGISTRY
 CN Hexanoic acid, 4,4'-(dithiobis(2,1-phenylene carbonylimino))bis[5-methyl-, (4R,4'R)-(9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C28 H36 N2 O6 S2
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

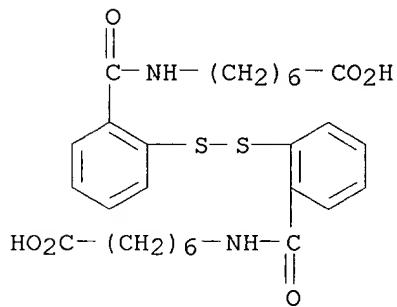


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 28 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 219309-41-8 REGISTRY
 CN Heptanoic acid, 7,7'-(dithiobis(2,1-phenylene carbonylimino))bis- (9CI)

(CA INDEX NAME)
 FS 3D CONCORD
 MF C28 H36 N2 O6 S2
 SR CA
 LC STN Files: CA, CAPLUS

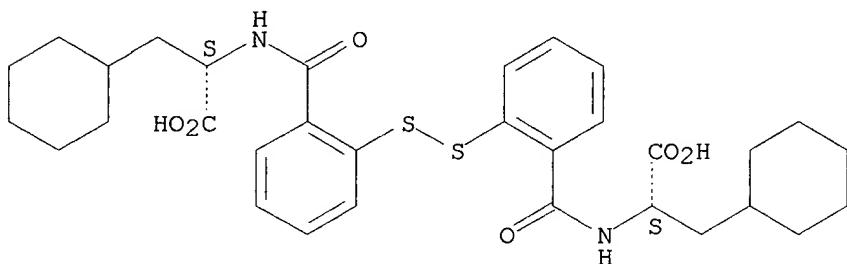


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 29 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 219309-24-7 REGISTRY
 CN Cyclohexanepropanoic acid, .alpha.,.alpha.'-[dithiobis(2,1-phenylene carbonylimino)]bis-, (.alpha.S,.alpha.'S)- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C32 H40 N2 O6 S2
 SR CA
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

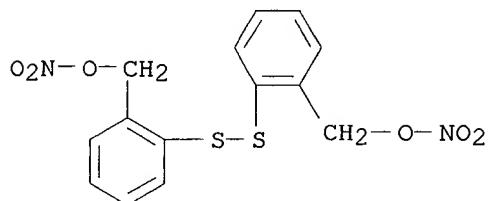


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 30 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 213982-40-2 REGISTRY
 CN Benzenemethanol, 2,2'-dithiobis-, dinitrate (9CI) (CA INDEX NAME)

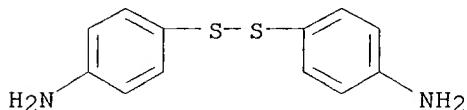
FS 3D CONCORD
MF C14 H12 N2 O6 S2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

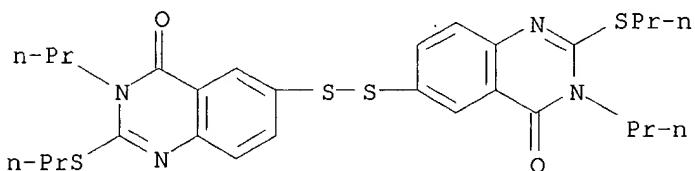
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 31 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 213126-89-7 REGISTRY
CN Benzenamine, 4,4'-dithiobis-, radical ion(1+) (9CI) (CA INDEX NAME)
MF C12 H12 N2 S2
CI RIS
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 32 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 209604-69-3 REGISTRY
CN 4(3H)-Quinazolinone, 6,6'-dithiobis[3-propyl-2-(propylthio)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H34 N4 O2 S4
SR CA
LC STN Files: CA, CAPLUS

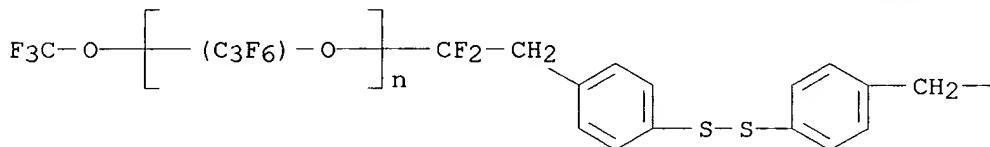


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

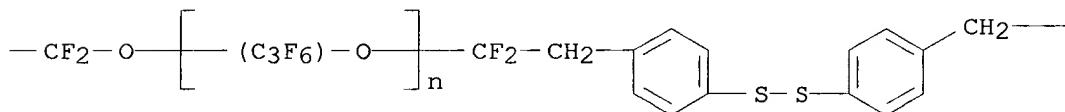
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 33 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 208645-95-8 REGISTRY
CN Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], .alpha.-[2-[4-[(4-(2,2-difluoro-2-hydroxyethyl)phenyl)dithio]phenyl]-1,1-difluoroethyl]-.omega.-(trifluoromethoxy)-, ether with .alpha.-hydro-.omega.-hydroxypoly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]] (2:1) (9CI) (CA INDEX NAME)
MF (C₃ F₆ O)_n (C₃ F₆ O)_n C₃₄ H₂₄ F₁₄ O₃ S₄
CI IDS, PMS
PCT Polyether
SR CA
LC STN Files: CA, CAPLUS

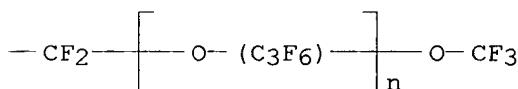
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PAGE 1-C

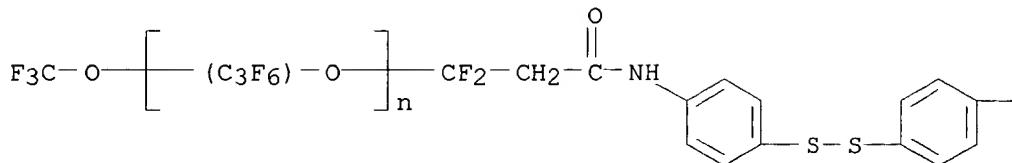


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

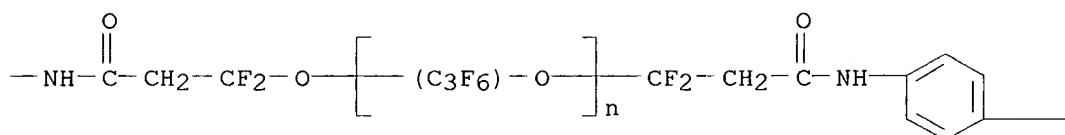
L2 ANSWER 34 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 208645-94-7 REGISTRY
CN Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], .alpha.-[3-[[4-[(3,3-difluoro-3-hydroxy-1-oxopropyl)amino]phenyl)dithio]phenyl]amino]-1,1-difluoro-3-oxopropyl]-.omega.-(trifluoromethoxy)-, ether with .alpha.-hydro-.omega.-hydroxypoly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]] (2:1) (9CI) (CA INDEX NAME)
MF (C₃ F₆ O)_n (C₃ F₆ O)_n (C₃ F₆ O)_n C₃₈ H₂₈ F₁₄ N₄ O₇ S₄
CI IDS, PMS
PCT Polyether

SR CA
LC STN Files: CA, CAPLUS

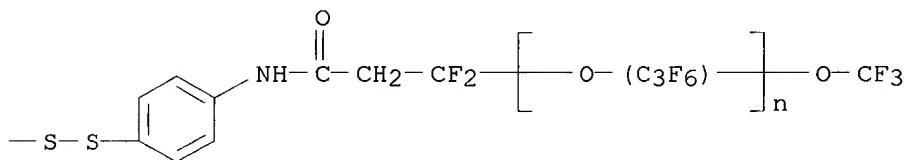
PAGE 1-A



PAGE 1-B



PAGE 1-C



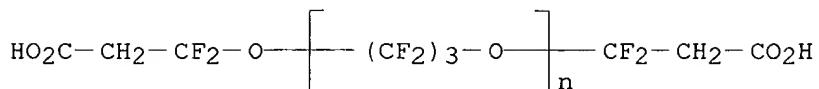
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 35 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 208536-52-1 REGISTRY
CN Benzenamine, 4,4'-dithiobis-, polymer with .alpha.- (2-carboxy-1,1-difluoroethyl)-.omega.- (2-carboxy-1,1-difluoroethoxy)poly[oxy(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Poly[oxy(1,1,2,2,3,3-hexafluoro-1,3-propanediyl)], .alpha.- (2-carboxy-1,1-difluoroethyl)-.omega.- (2-carboxy-1,1-difluoroethoxy)-, polymer with 4,4'-dithiobis[benzenamine] (9CI)
MF (C12 H12 N2 S2 . (C3 F6 O)n C6 H6 F4 O5)x
CI PMS
PCT Polyamide, Polyamide formed, Polyester, Polyester formed, Polyether, Polysulfide
SR CA
LC STN Files: CA, CAPLUS

CM 1

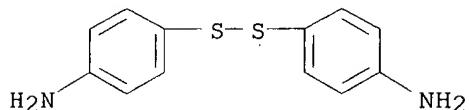
CRN 208594-63-2

CMF (C₃ F₆ O)_n C₆ H₆ F₄ O₅
CCI PMS



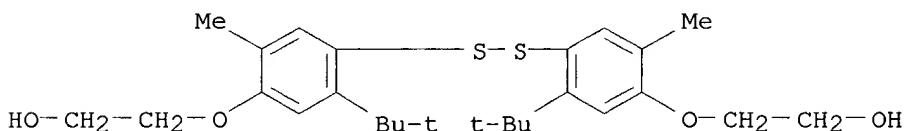
CM 2

CRN 722-27-0
CMF C₁₂ H₁₂ N₂ S₂



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 36 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 207737-12-0 REGISTRY
CN Ethanol, 2,2'-[dithiobis[[5-(1,1-dimethylethyl)-2-methyl-4,1-phenylene]oxy]]bis- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C₂₆ H₃₈ O₄ S₂
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



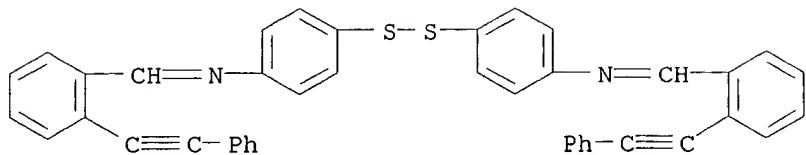
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 37 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 204018-02-0 REGISTRY
CN Benzenamine, 4,4'-dithiobis[N-[(2-(phenylethyynyl)phenyl)methylene]-, homopolymer (9CI) (CA INDEX NAME)
MF (C₄₂ H₂₈ N₂ S₂)_x
CI PMS
PCT Polyacetylene
SR CA
LC STN Files: CA, CAPLUS

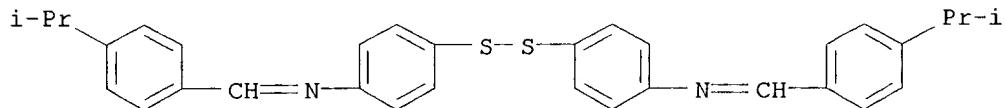
CM 1

CRN 204017-92-5
CMF C42 H28 N2 S2



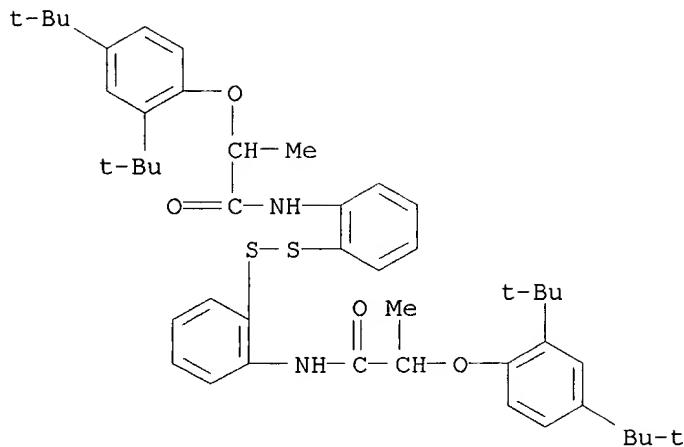
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 38 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 198899-35-3 REGISTRY
CN Benzenamine, 4,4'-dithiobis[N-[[4-(1-methylethyl)phenyl]methylene]- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C32 H32 N2 S2
SR CAS Registry Services
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

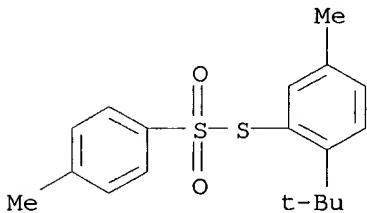
L2 ANSWER 39 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 198696-53-6 REGISTRY
CN Propanamide, N,N'-(dithiodi-2,1-phenylene)bis[2-[2,4-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C46 H60 N2 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

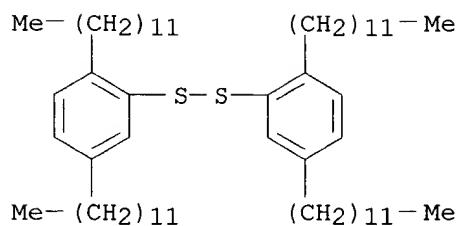
L2 ANSWER 40 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 198123-72-7 REGISTRY
 CN Benzenesulfonothioic acid, 4-methyl-, S-[2-(1,1-dimethylethyl)-5-methylphenyl] ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C18 H22 O2 S2
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

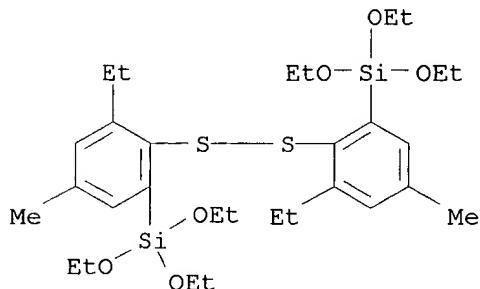
L2 ANSWER 41 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 195822-63-0 REGISTRY
 CN Disulfide, bis(2,5-didodecylphenyl) (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C60 H106 S2
 SR CA
 LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

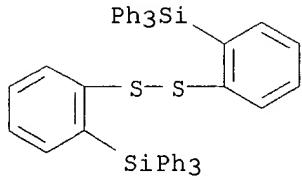
L2 ANSWER 42 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 194299-62-2 REGISTRY
CN Silane, [dithiobis(3-ethyl-5-methyl-2,1-phenylene)]bis[triethoxy-] (9CI)
(CA INDEX NAME)
MF C₃₀ H₅₀ O₆ S₂ Si₂
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

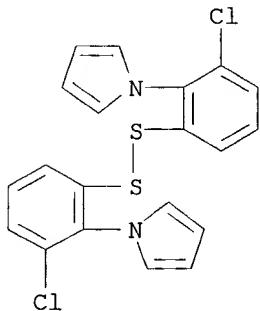
L2 ANSWER 43 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 189943-50-8 REGISTRY
CN Silane, (dithiodi-2,1-phenylene)bis[triphenyl-] (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C₄₈ H₃₈ S₂ Si₂
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

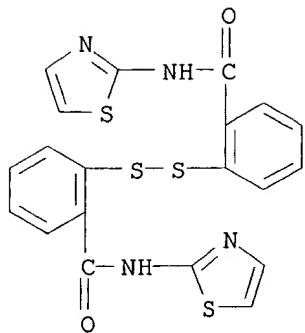
L2 ANSWER 44 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 189883-68-9 REGISTRY
 CN 1H-Pyrrole, 1,1'-[dithiobis(6-chloro-2,1-phenylene)]bis- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C20 H14 Cl2 N2 S2
 SR CA
 LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

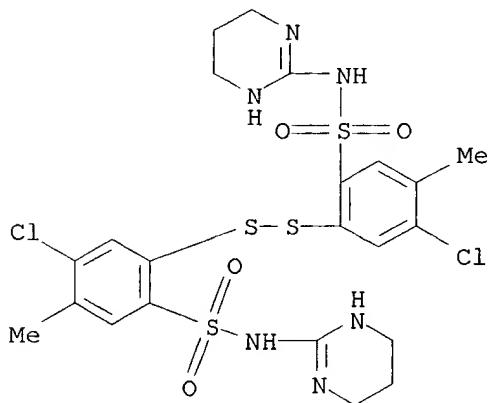
L2 ANSWER 45 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 189367-88-2 REGISTRY
 CN Benzamide, 2,2'-dithiobis[N-(2-thiazolyl)-] (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C20 H14 N4 O2 S4
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 46 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 189127-04-6 REGISTRY
 CN Benzenesulfonamide,
 2,2'-dithiobis[4-chloro-5-methyl-N-(3,4,5,6-tetrahydro-
 2-pyrimidinyl)- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C22 H26 Cl2 N6 O4 S4
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT



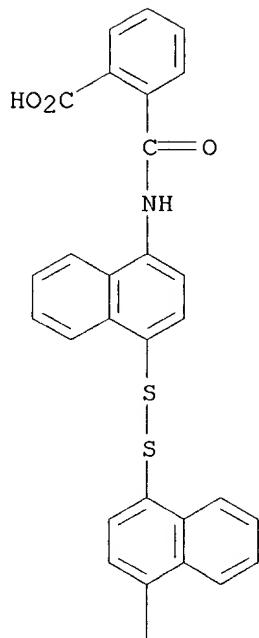
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

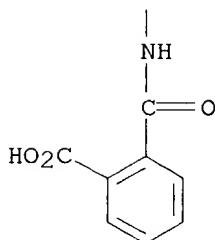
L2 ANSWER 47 OF 50 REGISTRY COPYRIGHT 2002 ACS
 RN 187744-17-8 REGISTRY
 CN Benzoic acid, 2,2'-[dithiobis(4,1-naphthalenediyliminocarbonyl)]bis-
 (9CI)
 (CA INDEX NAME)

FS 3D CONCORD
MF C36 H24 N2 O6 S2
SR CA
LC STN Files: CA, CAPLUS

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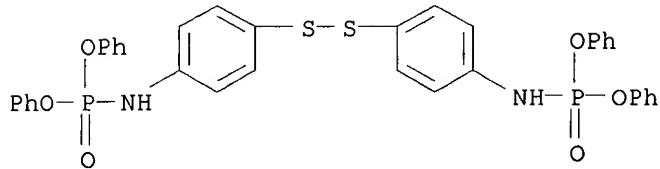


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 48 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 187744-16-7 REGISTRY
CN Phosphoramidic acid, (dithiodi-4,1-phenylene)bis-, tetraphenyl ester
(9CI)
(CA INDEX NAME)

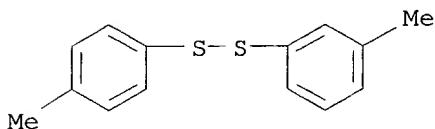
FS 3D CONCORD
MF C36 H30 N2 O6 P2 S2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

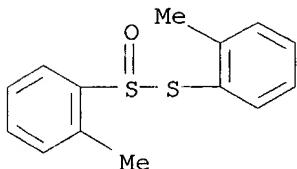
L2 ANSWER 49 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 186098-97-5 REGISTRY
CN Disulfide, 3-methylphenyl 4-methylphenyl (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H14 S2
SR CA
LC STN Files: CA, CAPLUS

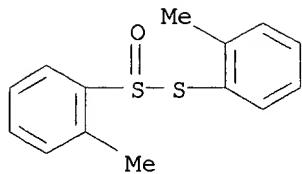


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L2 ANSWER 50 OF 50 REGISTRY COPYRIGHT 2002 ACS
RN 186098-94-2 REGISTRY
CN Benzenesulfinothioic acid, 2-methyl-, S-(2-methylphenyl) ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H14 O S2
SR CA
LC STN Files: CA, CAPLUS





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> S (LINKER)
 L3 839 (LINKER)

=> DIS L3 1 RN

L3 ANSWER 1 OF 839 REGISTRY COPYRIGHT 2002 ACS
 RN 366521-36-0 REGISTRY

=> FILE REG

FILE 'REGISTRY' ENTERED AT 10:43:24 ON 11 JAN 2002
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2
 DICTIONARY FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
 for more information. See STNote 27, Searching Properties in the CAS
 Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> STR 366521-36-0

366521-36-0 MAY NOT BE USED AS A MODEL
 Structures which were created via the STRUCTURE command or are in the
 Fragment File may be used as models in the STRUCTURE command. Most,
 but not all, substance Accession Numbers can also be used.
 ENTER NAME OF STRUCTURE TO BE RECALLED (NONE):END

=>
 THIS FEATURE IS NOT AVAILABLE FOR THE SELECTED CAS RN

```
=> s l2 and linker
      839 LINKER
L4          0 L2 AND LINKER
```

```
=> s l2 and link
      157 LINK
L5          0 L2 AND LINK
```

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=> FIL REGISTRY
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FILE 'REGISTRY' ENTERED AT 10:45:18 ON 11 JAN 2002
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STRUCTURE FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2
DICTIONARY FILE UPDATES: 9 JAN 2002 HIGHEST RN 381664-84-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

```
=> SET TERMSET E#
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SET COMMAND COMPLETED

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=> DEL SEL Y
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=> SEL L2 47 RN
```

E1 THROUGH E1 ASSIGNED

```
=> S E1/RN
```

L6 1 187744-17-8/RN

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=> SET TERMSET LOGIN
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SET COMMAND COMPLETED

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=> FIL CAPLUS
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FILE 'CAPLUS' ENTERED AT 10:45:24 ON 11 JAN 2002
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FILE COVERS 1907 - 11 Jan 2002 VOL 136 ISS 2
FILE LAST UPDATED: 9 Jan 2002 (20020109/ED)

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=> S L6

L7 1 L6

=> DIS L7 1 TI

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
TI Thermal processing type silver halide photographic material containing a disulfide derivative

=> DIS L7 1 TI

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
TI Thermal processing type silver halide photographic material containing a disulfide derivative

=> FIL REGISTRY

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Calculated physical property data is now available. See HELP PROPERTIES for more information., See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L2 31 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L8 1 213126-89-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

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FILE COVERS 1907 - 11 Jan 2002 VOL 136 ISS 2
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The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

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=> S L8

L9 1 L8

=> DIS L9 1 TI

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
TI Photochemical Reactions between C60 and Aromatic Thiols. Protonation of C60 via Photoinduced Electron Transfer

=> file caplus
FILE 'CAPLUS' ENTERED AT 10:46:42 ON 11 JAN 2002
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FILE COVERS 1907 - 11 Jan 2002 VOL 136 ISS 2
FILE LAST UPDATED: 9 Jan 2002 (20020109/ED)

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CAPLUS now provides online access to patents and literature covered in CA from 1907 to the present. Bibliographic information and abstracts were added in 2001 for over 3.8 million records from 1907-1966.

CAS roles have been modified effective December 16, 2001. Please

check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

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=> d his

(FILE 'HOME' ENTERED AT 10:39:29 ON 11 JAN 2002)

FILE 'REGISTRY' ENTERED AT 10:39:37 ON 11 JAN 2002

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 839 S (LINKER)

FILE 'REGISTRY' ENTERED AT 10:43:24 ON 11 JAN 2002

L4 0 S L2 AND LINKER
L5 0 S L2 AND LINK

FILE 'REGISTRY' ENTERED AT 10:45:18 ON 11 JAN 2002

SET TERMSET E#
DEL SEL Y
SEL L2 47 RN
L6 1 S E1/RN
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 10:45:24 ON 11 JAN 2002

L7 1 S L6

FILE 'REGISTRY' ENTERED AT 10:46:06 ON 11 JAN 2002

SET TERMSET E#
DEL SEL Y
SEL L2 31 RN
L8 1 S E1/RN
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 10:46:12 ON 11 JAN 2002

L9 1 S L8

FILE 'CAPLUS' ENTERED AT 10:46:42 ON 11 JAN 2002

=> s 12
L10 40 L2

=> d 110 1-40 ti

L10 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Antiferroelectric liquid crystal composition and liquid crystal element using it

L10 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2002 ACS

TI Compound containing a labile disulfide bond

L10 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Compound containing a labile disulfide bond

L10 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis of water-soluble amino sulfonamide ligands and their application
in enantioselective transfer hydrogenation

L10 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Selective cellular targeting: multifunctional delivery vehicles

L10 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Polythioethers having pendant hydroxymethyl groups with good hydrophilicity, dyeability, and solvent solubility, and their manufacture

L10 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI 7-(4,6-dimethoxypyrimidinyl)oxy- and -thiophthalides as novel herbicides: part 1. CGA 279 233: a new grass-killer for rice

L10 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI A compound containing a labile disulfide bond

L10 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Bis[2-(Acylamino)phenyl] Disulfides, 2-(Acylamino)benzenethiols, and S-[2-(Acylamino)phenyl] Alkanethioates as Novel Inhibitors of Cholesteryl Ester Transfer Protein

L10 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of spiro[1,2-dioxetane-3,2'-adamantane] derivatives as chemiluminescent reagents for determination of thiols and acetylcholinesterase

L10 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Ring transformation of 3-(2-oxopropyl)-2(3H)-benzothiazolone in reaction with primary amine

L10 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis of Heterocyclic Thiosulfonates

L10 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of dihydropyrones with tethered heterocycles as HIV protease inhibitors

L10 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI 5,6-Dihydropyran-2-ones Possessing Various Sulfonyl Functionalities: Potent Nonpeptidic Inhibitors of HIV Protease

L10 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Nonpeptidic HIV protease inhibitors possessing excellent antiviral activities and therapeutic indices. PD 178390: a lead HIV protease inhibitor

L10 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of benzamide thioesters, disulfides, benzisothiazolones, and related compounds as inactivators of zinc finger containing retroviruses.

L10 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Molecular assembly and micellization of molybdenum(V, IV) thiolate and selenolate complexes with long hydrocarbon chains

L10 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Syntheses of 1-amino-2-(4-chloro-2-mercaptophenenesulfonyl)guanidine derivatives with potential pharmacological activity

L10 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Syntheses of some 2-hydroxy-1-[(4-chloro-2-mercaptophenyl)sulfonyl]imidazole derivatives with potential anticancer activity

L10 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Sodium selenoborate for reduction of arylsulfonyl chlorides, sodium arylsulfinate, and aryl arylsulfonates

L10 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI A solid-phase technology for the preparation of combinatorial libraries through amide-bond anchoring

L10 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis and Biological Properties of Novel Pyridinioalkanoyl Thioesters (PATE) as Anti-HIV-1 Agents That Target the Viral Nucleocapsid Protein Zinc Fingers

L10 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI 2,2'-Dithiobisbenzamides derived from .alpha.-, .beta.- and .gamma.-amino acids possessing anti-HIV activities: synthesis and structure-activity relationship

L10 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of aromatic and heterocyclic nitrato derivatives as vasodilators

L10 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Photochemical Reactions between C₆₀ and Aromatic Thiols. Protonation of C₆₀ via Photoinduced Electron Transfer

L10 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of fungicidal quinazolinones

L10 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of 3-arylthio-6-arylethyl-4-hydroxy-5,6-dihydropyran-2-ones as antiretrovirals.

L10 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Magnetic recording medium and recording apparatus using same

L10 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Electroconductive polymers from Schiff's base monomers end-capped with terminal phenylacetylene groups. II

L10 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Photographic element containing recrystallizable 5-pyrazolone photographic

coupler

L10 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI 4-Hydroxy-5,6-dihydropyrones. 2. Potent Non-Peptide Inhibitors of HIV Protease

L10 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis and structural characterization of alkyl-substituted oligo(thio-1,4-phenylene)s

L10 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Process for the preparation of organosilicon disulfide compounds

L10 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Silver halide photographic material containing sulfonyl and/or disulfide compound as fog inhibitor

L10 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Bis[2-(triphenylsilyl)phenyl] disulfide

L10 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI New pyrrolobenzothiazepine derivatives as molecular probes of the "peripheral-type" benzodiazepine receptor (PBR) binding site

L10 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI A new class of anti-HIV-1 agents targeted toward the nucleocapsid protein NCp7: the 2,2'-dithiobisbenzamides

L10 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Thermal processing type silver halide photographic material containing a disulfide derivative

L10 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI Derivatives of 2-mercaptopbenzenesulfonamide. XIX. Syntheses, anticancer and anti-HIV activities of some 2-(4-chloro-2-mercaptopbenzenesulfonylimino)perhydropyrimidines

L10 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2002 ACS
TI The "Thio-Arbuzov" reaction of sulfenate esters with sulfenyl chlorides: fate of the thiosulfinate product

=> d 110 1-10 all

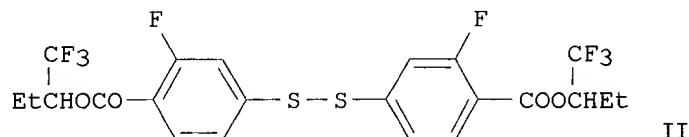
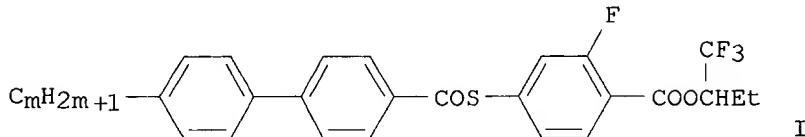
L10 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2001:873232 CAPLUS
DN 136:29244
TI Antiferroelectric liquid crystal composition and liquid crystal element using it
IN Aihara, Yoshihiko; Mogamiya, Hiroyuki; Yamakawa, Noriko
PA Showa Shell Sekiyu K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07C327-32
 ICS C07C323-62; C09K019-02; C09K019-28; G02F001-13
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)
Section cross-reference(s): 25, 75

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|------|----------|-----------------|----------|
| PI JP 2001335558 | A2 | 20011204 | JP 2000-156521 | 20000526 |

GI



AB The liq. crystal compn. has phase transition temp. $\geq 90^\circ\text{C}$. from

antiferroelec. phase or tristable phase to SmA (smectic A) phase measured by temp. rising process and response speed (τ) $\leq 5.0 \mu\text{s}$ at temp. lower than $(T - 40)^\circ\text{C}$. (T = the phase transition temp.). 4-(1,1,1-Trifluorobutyl-2-oxy carbonyl)-3-fluorophenyl-4'-alkyl biphenyl-4-thiocarboxylate I ($m = 5-11$) liq. crystal compd. is prep'd. by the reaction

of 4-(1,1,1-trifluorobutyl-2-oxy carbonyl)-3-fluorophenyl disulfide II with

4'-alkyl-4-biphenylcarboxylic acid $C_mH_{2m+1}(p-C_6H_4)(p-C_6H_4)CO_2H$ ($m = 5-11$).

4-(1,1,1-Trifluorobutyl-2-oxy carbonyl)-3-fluorophenyl disulfide II is also

claimed. Ferroelec. or antiferroelec. liq. crystal compn. contains I and liq. crystal element contains the compn. The compn. shows antiferroelec. or tristable phase at high temp. and rapid response in wide temp. range.

ST liq crystal antiferroelec ferroelec; biphenyl thiocarboxylate liq crystal compd

IT Liquid crystal displays

(antiferroelec. or tristable liq. crystal compn. contg. di-Ph thiocarboxylate compd.)

IT Antiferroelectric materials

Ferroelectric materials
(liq.-crystal; antiferroelec. or tristable liq. crystal compn. contg. di-Ph thiocarboxylate compd.)

IT Liquid crystals

(smectic; antiferroelec. or tristable liq. crystal compn. contg. di-Ph thiocarboxylate compd.)

IT 377778-29-5

RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)
(antiferroelec. or tristable liq. crystal compn. contg. di-Ph

IT thiocarboxylate compd.)
 IT 377778-22-8 377778-23-9 377778-25-1 377778-27-3 377778-28-4
 377778-30-8
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (antiferroelec. or tristable liq. crystal compn. contg. di-Ph
 thiocarboxylate compd.)
 IT **377778-32-0**
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)
 (prepn. and reaction with biphenyl carboxylic acid)
 IT 403-24-7, 2-Fluoro-4-nitrobenzoic acid 446-31-1 210416-38-9
 210416-39-0
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)
 (prepn. of di-Ph disulfide compd.)
 IT 1427-07-2, 2-Fluoro-4-nitrotoluene
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of di-Ph disulfide compd.)
 IT 101054-97-1 115154-83-1, 4'-Decyl-4-biphenylcarboxylic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of thiocarboxylate liq. crystal compd.)

 L10 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:851787 CAPLUS
 DN 136:11089
 TI Compound containing a labile disulfide bond
 IN Wolff, Jon A.; Monahan, Sean D.; Budker, Vladimir G.; Slattum, Paul M.;
 Rozema, David B.
 PA USA
 SO U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 312,351.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K048-00
 ICS A61K038-00; C07H021-04; C07K014-00
 NCL 514044000
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 1
 FAN.CNT 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|----------|
| PI US 2001044417 | A1 | 20011122 | US 2001-779791 | 20010208 |
| PRAI US 1999-312351 | A2 | 19990514 | | |

 AB A labile disulfide-contg. compd. under physiol. conditions contg. a
 labile
 disulfide bond and a transduction signal is disclosed. A process for
 delivery of a compd. to a cell, comprising assocg. a compd. contg. a
 disulfide bond that can be cleaved under physiol. conditions, with a
 polymer, then delivering the polymer to the cell. The polymer may
 comprise a first polymer and a second polymer. The first polymer and the
 second polymer may comprise nucleic acids, proteins, genes, antisense
 polymers, DNA/RNA hybrids, or synthetic polymers.
 ST drug delivery disulfide conjugate protein DNA
 IT Proteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (ANTP, signalling; compd. contg. a labile disulfide bond)
 IT Proteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(VP22, signalling; compd. contg. a labile disulfide bond)

IT Polyelectrolytes
(cationic; compd. contg. a labile disulfide bond)

IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(cationic; compd. contg. a labile disulfide bond)

IT Disulfide group
Drug delivery systems
Gene therapy
Particle size
Plasmid vectors
Signal transduction, biological
Transformation, genetic
(compd. contg. a labile disulfide bond)

IT Nucleic acids
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(compd. contg. a labile disulfide bond)

IT Thiols (organic), biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(compd. contg. a labile disulfide bond)

IT DNA
RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(complexes; compd. contg. a labile disulfide bond)

IT Mammal (Mammalia)
(drug delivery to; compd. contg. a labile disulfide bond)

IT Drug delivery systems
(injections, i.m.; compd. contg. a labile disulfide bond)

IT Drug delivery systems
(prodrugs; compd. contg. a labile disulfide bond)

IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(tat, signalling; compd. contg. a labile disulfide bond)

IT 27025-41-8, Oxidized glutathione
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(cleavage of; compd. contg. a labile disulfide bond)

IT 25104-18-1DP, Poly-L-lysine, complexes 38000-06-5DP, Poly-L-lysine, complexes
RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compd. contg. a labile disulfide bond)

IT 56-17-7, Cystamine dihydrochloride 56-18-8 56-89-3, L-Cystine
69-78-3 112-57-2, Tetraethylenepentamine 538-75-0,
Dicyclohexylcarbodiimide 627-18-9 722-27-0, 4-Aminophenyl disulfide
1738-25-6, 3-Dimethylaminopropionitrile 4067-16-7,
Pentaethylenehexamine
4097-89-6, Tris(2-aminoethyl)amine 4741-99-5 6066-82-6,
N-Hydroxysuccinimide 7087-68-5, Diisopropylethylamine 7209-38-3,
1,4-Bis(3-aminopropyl)piperazine 13531-52-7 25988-63-0, Poly-L-lysine

hydrobromide 52328-05-9, O-Methylisourea hydrogen sulfate 58632-95-4,
 2-(tert-Butoxycarbonyloxyimino)-2-phenylacetonitrile 62796-29-6
 106754-95-4, 4'-(Aminomethyl)fluorescein 289888-15-9 289888-16-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (compd. contg. a labile disulfide bond)
 IT 10389-65-8P 13551-09-2P 60129-38-6P **313056-27-8P**
 313056-28-9P 313056-31-4P 313056-32-5P 371246-55-8P
 375377-92-7DP,
 Tat conjugates 375377-93-8P 375377-94-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (compd. contg. a labile disulfide bond)
 IT 289888-07-9P 289888-08-0P 289888-09-1P 289888-10-4P 289888-11-5P
 289888-12-6P 289888-14-8P 313056-35-8P 313056-36-9P 371246-57-0P
 371246-59-2P 371246-66-1P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (compd. contg. a labile disulfide bond)

L10 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:798751 CAPLUS
 DN 135:344919
 TI Compound containing a labile disulfide bond
 IN Wolff, Jon A.; Monahan, Sean D.; Budker, Vladimir G.; Slattum, Paul M.;
 Rozema, David B.
 PA USA
 SO U.S. Pat. Appl. Publ., 22 pp., Division of U.S. Ser. No. 312,351.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K048-00
 ICS A61K038-00; C07H021-02; C07H021-04
 NCL 514044000
 CC 35-5 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 33, 34, 63

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 2001036926 | A1 | 20011101 | US 2001-795607 | 20010228 |
| PRAI | US 1998-85764 | P | 19980516 | | |
| | US 1999-312351 | A3 | 19990514 | | |

AB A labile disulfide-contg. compd. under physiol. conditions, comprises the
 disulfide-contg. compd. having a labile disulfide bond that is either a
 disulfide bond that is cleaved more rapidly than oxidized glutathione or
 a
 disulfide bond constructed from thiols in which one of the constituent
 thiols has a lower pKa than glutathione or a disulfide bond that is
 activated by intramol. attack from a free thiol. Copolymers may be
 prep'd.
 by the condensation of N-(2-Aminoethyl)-1,3-propanediamine and Di-Me
 5,5'-dithiobis(2-nitrobenzoate)propionimidate-2 HCl.
 ST aminoethyl propanediamine methyl dithiobisnitrobenzoate propionimidate
 copolymer; disulfide bond contg polymer cleavable physiol condition
 IT Transformation, genetic
 (compd. contg. a labile disulfide bond for polymer delivery to cell)
 IT Nucleotides, preparation
 Peptides, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)

(compd. contg. a labile disulfide bond for polymer delivery to cell)

IT DNA
RL: BPR (Biological process); RCT (Reactant); BIOL (Biological study);
PROC (Process)
(complexes with labile disulfide bond contg. polymer; compd. contg. a
labile disulfide bond for polymer delivery to cell)

IT Plasmid vectors
(pCI Luc, complexes with DNA; compd. contg. a labile disulfide bond
for
polymer delivery to cell)

IT 9002-98-6D, complexes with DNA 25104-18-1D, Poly-L-Lysine, complexes
with DNA 38000-06-5D, Poly-L-Lysine, complexes with DNA 289888-07-9D,
complexes with DNA 289888-09-1D, complexes with DNA 289888-10-4D,
complexes with DNA 289888-11-5D, complexes with DNA 289888-12-6D,
complexes with DNA 289888-14-8D, complexes with DNA 289888-15-9D,
complexes with DNA 313056-28-9D, complexes with DNA 313056-34-7D,
complexes with DNA 313056-37-0D, complexes with DNA
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(compd. contg. a labile disulfide bond for polymer delivery to cell)

IT 289888-07-9P 289888-08-0P 289888-09-1P 289888-10-4P 289888-11-5P
289888-12-6P 289888-14-8P 289888-15-9P 313056-29-0P 313056-34-7P
371246-55-8P 371246-57-0P 371246-58-1P 371246-59-2P 371246-60-5P
371246-61-6P 371246-62-7P 371246-63-8P 371246-64-9P 371246-65-0P
371246-66-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(compd. contg. a labile disulfide bond for polymer delivery to cell)

IT 13551-09-2P 313056-31-4P 313056-32-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)
(compd. contg. a labile disulfide bond for polymer delivery to cell)

IT 56-89-3, L-Cystine, reactions 69-78-3, 5,5'-Dithiobis(2-nitrobenzoic
acid) 109-78-4, 3-Hydroxypropionitrile 627-18-9 1738-25-6,
3-Dimethylaminopropionitrile 6066-82-6, N-Hydroxysuccinimide
52328-05-9, O-Methylisourea hydrogen sulfate 58632-95-4,
2-(tert-Butoxycarbonyloxyimino)-2-phenylacetonitrile
RL: RCT (Reactant)
(compd. contg. a labile disulfide bond for polymer delivery to cell)

IT 371246-56-9P
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. and deprotection; compd. contg. a labile disulfide bond for
polymer delivery to cell)

IT 10389-65-8P 60129-38-6P **313056-27-8P** 313056-28-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)
(prepn. and polymn.; compd. contg. a labile disulfide bond for polymer
delivery to cell)

IT 70-18-8, Glutathione, reactions
RL: RCT (Reactant)
(reducing agent; compd. contg. a labile disulfide bond for polymer
delivery to cell)

L10 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2001:402263 CAPLUS
DN 135:210788
TI Synthesis of water-soluble amino sulfonamide ligands and their
application
in enantioselective transfer hydrogenation
AU Bubert, C.; Blacker, J.; Brown, S. M.; Crosby, J.; Fitzjohn, S.;
Muxworthy, J. P.; Thorpe, T.; Williams, J. M. J.
CS Department of Chemistry, University of Bath, Bath, BA2 7AY, UK

SO Tetrahedron Lett. (2001), 42(24), 4037-4039
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
CC 25-7 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
AB Water-sol. analogs of Noyori's (1S,2S)-N-(*p*-tolylsulfonyl)-1,2-diphenylethylenediamine and Knochel's (1R,2R)-N-(*p*-tolylsulfonyl)-1,2-diaminocyclohexane, contg. an addnl. sulfonic acid group, have been synthesized. The ruthenium catalyzed redn. of arom. ketones using enantiomerically pure catalyst derived from the water sol. ligands and [RuCl₂(*p*-cymene)]₂ has been exmd. High enantioselectivity and moderate activity were obsd. in the 2-propanol/base system. The addn. of water is necessary to stabilize the catalyst.
ST asym transfer hydrogenation arom ketone; ruthenium amino sulfonamide asym transfer hydrogenation catalyst; arom alc alc asym prepn
IT Alcohols, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(aralkyl; prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT Ketones, reactions
RL: RCT (Reactant)
(arom.; prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT Hydrogenation catalysts
(transfer, stereoselective; ruthenium complexes with water-sol. amino sulfonamide ligands for arom. ketones)
IT 126420-28-8
RL: CAT (Catalyst use); USES (Uses)
(prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT 357611-95-1P 357611-96-2P 357611-97-3P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT 93-08-3, 2-Acetylnaphthalene 98-86-2, Acetophenone, reactions
100-06-1, 4'-Methoxyacetophenone 121-57-3, 4-Aminobenzenesulfonic acid
349-76-8, 3'-(Trifluoromethyl)acetophenone 709-63-7,
4'-(Trifluoromethyl)acetophenone 20439-47-8, (1R,2R)-1,2-Cyclohexanediamine 33356-82-0, 1,2-Benzenedisulfonic anhydride
RL: RCT (Reactant)
(prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT 27738-88-1P 27738-91-6P 29841-69-8P **357611-98-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
IT 1445-91-6P 1517-69-7P 1517-70-0P 1572-97-0P 27544-18-9P
52193-85-8P 76155-79-8P 96789-80-9P 99493-93-3P 127852-24-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of water-sol. amino sulfonamide ligands and their application in enantioselective transfer hydrogenation)
RE.CNT 18
RE
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L10 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 2001:380438 CAPLUS

DN 135:24657

TI Selective cellular targeting: multifunctional delivery vehicles

IN Glazier, Arnold

PA Drug Innovation + Design, Inc., USA

SO PCT Int. Appl., 981 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-48

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 8, 15, 25, 28

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2001036003 | A2 | 20010525 | WO 2000-US31262 | 20001114 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |

PRAI US 1999-165485 P 19991115

US 2000-239478 P 20001011

US 2000-241939 P 20001020

AB The present invention relates to the compns., methods, and applications of

a novel approach to selective cellular targeting. The purpose of this invention is to enable the selective delivery and/or selective activation of effector mols. to target cells for diagnostic or therapeutic purposes. The present invention relates to multi-functional prodrugs or targeting vehicles wherein each functionality is capable of enhancing targeting selectivity, affinity, intracellular transport, activation or detoxification. The present invention also relates to ultralow dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for

cancer treatment.

ST antitumor drug targeting delivery vehicle

IT Multidrug resistance proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MDR1, inhibitors; multifunctional delivery vehicles for selective
cellular targeting of drugs)

IT Prostate gland
(adenocarcinoma; multifunctional delivery vehicles for selective
cellular targeting of drugs)

IT Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(cell-surface; multifunctional delivery vehicles for selective
cellular targeting of drugs)

IT Cholecystokinin receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(cholecystokinin B; multifunctional delivery vehicles for selective
cellular targeting of drugs)

IT Proteins, specific or class
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(complexes; multifunctional delivery vehicles for selective cellular
targeting of drugs)

IT Proteins, specific or class
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(fibroblast-activating; multifunctional delivery vehicles for
selective cellular targeting of drugs)

IT Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(folate; multifunctional delivery vehicles for selective cellular
targeting of drugs)

IT Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(for bombesin-releasing peptide; multifunctional delivery vehicles for
selective cellular targeting of drugs)

IT Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(for gastrin-releasing peptide; multifunctional delivery vehicles for
selective cellular targeting of drugs)

IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(for nucleosides, inhibitors; multifunctional delivery vehicles for
selective cellular targeting of drugs)

IT Biological transport
(intracellular; multifunctional delivery vehicles for selective
cellular targeting of drugs)

IT Antibodies
RL: BPR (Biological process); PEP (Physical, engineering or chemical
process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
USES (Uses)
(monoclonal; multifunctional delivery vehicles for selective cellular
targeting of drugs)

IT Antitumor agents
Cell division
Chelating agents
Cytotoxic agents
Drug targeting
Imaging agents
Immunization
Immunostimulants
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Enzymes, biological studies
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Laminin receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT MSH receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT P-glycoproteins
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Prostate-specific antigen
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Somatostatin receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Biopolymers
RL: BOC (Biological occurrence); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PROC (Process); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Anthracyclines
Radionuclides
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Antigens
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(neoantigens; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(nitrobenzylthioinosine-binding; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(norepinephrine-transporting; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Benzodiazepine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peripheral; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Drug delivery systems
(prodrugs; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Ligands
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(targetable; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Drug delivery systems
(targeted; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Nucleosides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(transport proteins; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Antigens
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(tumor-assocd.; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Vaccines
(tumor; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Biological transport
(uptake; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Antitumor agents
(vaccines; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Opioid receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.sigma.-opioid; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT Integrins
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(.alpha.v.beta.3; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 9001-01-8, Kallikrein
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(2, human glandular; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 9024-62-8, Orotidine 5'-phosphate decarboxylase 9029-03-2,
Dihydroorotic acid dehydrogenase 9032-02-4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 342397-39-1P
RL: BAC (Biological activity or effector, except adverse); BPR
(Biological process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 341549-52-8P 341549-53-9P 341549-71-1P 341549-87-9P 341552-14-5P
341552-35-0P 341552-87-2P 341553-15-9P 341553-47-7P 341553-59-1P
341990-79-2P 341990-80-5P 341990-94-1P 341990-96-3P 341990-98-5P
341990-99-6P 341991-00-2P 342383-78-2P 342384-75-2P 342385-42-6P
342388-64-1P 342389-43-9P 342389-44-0P 342389-46-2P 342389-61-1P
342389-62-2P 342389-65-5P 342389-66-6P 342389-71-3P 342389-73-5P
342389-75-7P 342389-76-8P 342390-71-0P 342391-02-0P 342391-78-0P
342392-24-9P 342392-67-0P 342392-75-0P 342392-76-1P 342392-79-4P
342392-80-7P 342395-29-3P 342395-30-6P 342395-36-2P 342395-37-3P
342395-39-5P 342395-40-8P 342395-41-9P 342395-43-1P 342395-44-2P
342395-69-1P 342395-74-8P 342395-75-9P 342395-77-1P 342395-78-2P
342395-79-3P 342395-81-7P 342395-84-0P 342395-85-1P 342395-95-3P
342396-15-0P 342396-56-9P 342397-18-6P 342397-65-3P
RL: BAC (Biological activity or effector, except adverse); PNU
(Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 341549-26-6P 341549-27-7P 342389-60-0P 342392-57-8P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 9001-12-1, Collagenase 9001-77-8 9001-92-7, Proteinase 9002-07-7,
Trypsin 9004-06-2, MMP 12 9004-08-4, Cathepsin 9025-26-7, Cathepsin d 9025-62-1, Steroid sulfatase 9030-23-3, Thymidine phosphorylase 9031-61-2, Thymidylate synthase 9039-53-6, Urokinase 9040-48-6, Gelatinase 9045-77-6, Fatty acid synthase 9047-22-7, Cathepsin b 9074-87-7, Glutamate carboxypeptidase II 60616-82-2, Cathepsin L 62229-50-9, Egf 79955-99-0, MMP-3 84419-03-4, Guanidinobenzoatase 94716-09-3, Cathepsin k 115926-52-8, Phosphatidylinositol 3-kinase 141256-52-2, Matrilysin 141907-41-7, Matrix metalloproteinase 142008-29-5, Protein kinase a 142243-02-5, Map kinase 142805-58-1,

Map kinase kinase 145267-01-2, Stromelysin 3 146480-35-5, MMP 2
162032-86-2, Cathepsin O 175449-82-8, MMP-13 241475-96-7, Matriptase
RL: BOC (Biological occurrence); BPR (Biological process); BIOL
(Biological study); OCCU (Occurrence); PROC (Process)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 9001-90-5, Plasmin

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)

IT 50-07-7, Mitomycin c 57-22-7, Vincristine 58-85-5D, Biotin, masked derivs. 59-30-3D, Folic acid, masked derivs. 518-28-5D, Podophyllotoxin, derivs. 519-23-3D, Ellipticine, derivs. 865-21-4, Vinblastine 7689-03-4, Camptothecin 10159-53-2D, Phosphoramido mustard, analogs 11116-31-7D, Bleomycin A2, derivs. 24280-93-1, Mycophenolic acid 33069-62-4D, Taxol, derivs. 52128-35-5,

Trimetrexate
 65271-80-9D, Mitoxantrone, derivs. 77327-05-0, Didemnin B 112953-11-4
 114899-77-3D, Ecteinascidin 743, derivs. 124689-65-2D, analogs

, 139987-54-5, BW 1843U89 175795-76-3 236743-94-5, Phthalascidin 265646-19-3, Indanocine

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)

| | | | | | |
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| IT | 1194-98-5P | 1499-29-2P | 6974-29-4P | 90359-20-9P | 138915-62-5P |
| | 147281-71-8P | 165172-57-6P | 165454-06-8P | 177575-34-7P | 214532-01-1P |
| | 216220-13-2P | 240428-96-0P | 341549-88-0P | 341549-89-1P | 341549-90-4P |
| | 341549-91-5P | 341549-92-6P | 341549-93-7P | 341549-94-8P | 341549-95-9P |
| | 341549-96-0P | 341549-97-1P | 341549-98-2P | 341549-99-3P | 341550-00-3P |
| | 341550-01-4P | 341550-02-5P | 341550-03-6P | 341550-04-7P | 341550-05-8P |
| | 341550-06-9P | 341550-07-0P | 341550-08-1P | 341550-09-2P | 341550-10-5P |
| | 341550-11-6P | 341550-12-7P | 341550-13-8P | 341550-14-9P | 341550-15-0P |
| | 341550-16-1P | 341550-17-2P | 341550-18-3P | 341550-19-4P | 341550-20-7P |
| | 341550-21-8P | 341550-22-9P | 341550-23-0P | 341550-24-1P | 341550-25-2P |
| | 341550-26-3P | 341550-27-4P | 341550-28-5P | 341550-29-6P | 341550-30-9P |
| | 341550-31-0P | 341550-32-1P | 341550-33-2P | 341550-34-3P | 341550-35-4P |
| | 341550-36-5P | 341550-37-6P | 341550-38-7P | 341550-39-8P | 341550-40-1P |
| | 341550-41-2P | 341550-42-3P | 341550-43-4P | 341550-44-5P | 341550-45-6P |
| | 341550-46-7P | 341550-47-8P | 341550-48-9P | 341550-49-0P | 341550-50-3P |
| | 341550-51-4P | 341550-52-5P | 341550-53-6P | 341550-54-7P | 341550-55-8P |
| | 341550-56-9P | 341550-57-0P | 341550-58-1P | 341550-59-2P | 341550-60-5P |
| | 341550-61-6P | 341550-62-7P | 341550-63-8P | 341550-64-9P | 341550-65-0P |
| | 341550-66-1P | 341550-67-2P | 341550-68-3P | 341550-69-4P | 341550-70-7P |
| | 341550-71-8P | 341550-72-9P | 341550-73-0P | 341550-74-1P | 341550-75-2P |
| | 341550-76-3P | 341550-77-4P | 341550-78-5P | 341550-79-6P | 341550-80-9P |
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| | 341550-86-5P | 341550-87-6P | 341550-88-7P | 341550-89-8P | 341550-90-1P |
| | 341550-91-2P | 341550-92-3P | 341550-93-4P | 341550-94-5P | 341550-95-6P |
| | 341550-96-7P | 341550-97-8P | 341550-98-9P | 341550-99-0P | 341551-00-6P |
| | 341551-01-7P | 341551-02-8P | 341551-03-9P | 341551-04-0P | 341551-05-1P |
| | 341551-06-2P | 341551-07-3P | 341551-08-4P | 341551-09-5P | 341551-10-8P |
| | 341551-11-9P | 341551-12-0P | 341551-14-2P | 341551-16-4P | 341551-17-5P |
| | 341551-18-6P | 341551-19-7P | 341551-20-0P | 341551-21-1P | 341551-22-2P |
| | 341551-23-3P | 341551-24-4P | 341551-25-5P | 341551-26-6P | 341551-27-7P |
| | 341551-28-8P | 341551-29-9P | 341551-30-2P | 341551-31-3P | 341551-32-4P |
| | 341551-33-5P | 341551-34-6P | 341551-35-7P | 341551-36-8P | 341551-37-9P |
| | 341551-38-0P | 341551-39-1P | 341551-40-4P | 341551-41-5P | 341551-42-6P |
| | 341551-43-7P | 341551-44-8P | 341551-45-9P | 341551-46-0P | 341551-47-1P |
| | 341551-48-2P | 341551-49-3P | 341551-50-6P | 341551-51-7P | 341551-52-8P |
| | 341551-53-9P | 341551-54-0P | 341551-55-1P | 341551-56-2P | 341551-57-3P |
| | 341551-58-4P | 341551-59-5P | 341551-60-8P | 341551-61-9P | 341551-62-0P |
| | 341551-63-1P | 341551-64-2P | 341551-65-3P | 341551-67-5P | 341551-68-6P |
| | 341551-69-7P | 341551-70-0P | 341551-71-1P | 341551-72-2P | |

| | | | | |
|---------------------|--------------|--------------|--------------|--------------|
| 341551-73-3P | 341551-74-4P | 341551-75-5P | 341551-76-6P | |
| 341551-77-7P | 341551-78-8P | 341551-79-9P | 341551-80-2P | 341551-81-3P |
| 341551-82-4P | 341551-83-5P | 341551-84-6P | 341551-85-7P | 341551-86-8P |
| 341551-87-9P | 341551-88-0P | 341551-89-1P | 341551-90-4P | 341551-91-5P |
| 341551-92-6P | 341551-93-7P | 341551-94-8P | 341551-95-9P | 341551-96-0P |
| 341551-97-1P | 341551-98-2P | 341551-99-3P | 341552-00-9P | 341552-01-0P |
| 341552-02-1P | 341552-03-2P | 341552-04-3P | 341552-05-4P | 341552-06-5P |
| 341552-07-6P | 341552-08-7P | 341552-09-8P | 341552-10-1P | 341552-11-2P |
| 341552-12-3P | 341552-13-4P | | | |

RL: PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 341552-15-6P | 341552-16-7P | 341552-17-8P | 341552-18-9P | 341552-19-0P |
| | 341552-20-3P | 341552-21-4P | 341552-22-5P | 341552-23-6P | 341552-24-7P |
| | 341552-25-8P | 341552-26-9P | 341552-27-0P | 341552-28-1P | 341552-29-2P |
| | 341552-30-5P | 341552-31-6P | 341552-32-7P | 341552-33-8P | 341552-34-9P |
| | 341552-36-1P | 341552-37-2P | 341552-38-3P | 341552-39-4P | 341552-40-7P |
| | 341552-41-8P | 341552-42-9P | 341552-43-0P | 341552-44-1P | 341552-45-2P |
| | 341552-46-3P | 341552-47-4P | 341552-48-5P | 341552-49-6P | 341552-50-9P |
| | 341552-51-0P | 341552-52-1P | 341552-53-2P | 341552-54-3P | 341552-55-4P |
| | 341552-56-5P | 341552-57-6P | 341552-58-7P | 341552-59-8P | 341552-60-1P |
| | 341552-61-2P | 341552-62-3P | 341552-63-4P | 341552-64-5P | 341552-65-6P |
| | 341552-66-7P | 341552-67-8P | 341552-68-9P | 341552-69-0P | 341552-70-3P |
| | 341552-71-4P | 341552-72-5P | 341552-73-6P | 341552-74-7P | 341552-75-8P |
| | 341552-76-9P | 341552-77-0P | 341552-78-1P | 341552-79-2P | 341552-80-5P |
| | 341552-81-6P | 341552-82-7P | 341552-83-8P | 341552-84-9P | 341552-85-0P |
| | 341552-86-1P | 341552-88-3P | 341552-89-4P | 341552-90-7P | 341552-91-8P |
| | 341552-93-0P | 341552-94-1P | 341552-95-2P | 341552-96-3P | 341552-97-4P |
| | 341552-98-5P | 341552-99-6P | 341553-00-2P | 341553-01-3P | 341553-02-4P |
| | 341553-03-5P | 341553-04-6P | 341553-05-7P | 341553-06-8P | 341553-07-9P |
| | 341553-08-0P | 341553-09-1P | 341553-10-4P | 341553-11-5P | 341553-12-6P |
| | 341553-13-7P | 341553-14-8P | 341553-16-0P | 341553-17-1P | 341553-18-2P |
| | 341553-19-3P | 341553-20-6P | 341553-21-7P | 341553-22-8P | 341553-23-9P |
| | 341553-24-0P | 341553-25-1P | 341553-26-2P | 341553-27-3P | 341553-28-4P |
| | 341553-29-5P | 341553-30-8P | 341553-31-9P | 341553-32-0P | 341553-33-1P |
| | 341553-34-2P | 341553-35-3P | 341553-36-4P | 341553-37-5P | 341553-38-6P |
| | 341553-39-7P | 341553-40-0P | 341553-41-1P | 341553-42-2P | 341553-43-3P |
| | 341553-45-5P | 341553-46-6P | 341553-48-8P | 341553-49-9P | 341553-50-2P |
| | 341553-51-3P | 341553-52-4P | 341553-53-5P | 341553-54-6P | 341553-55-7P |
| | 341553-56-8P | 341553-57-9P | 341553-58-0P | 341553-60-4P | 341553-61-5P |
| | 341553-62-6P | 341553-63-7P | 341553-64-8P | 341553-65-9P | 341553-67-1P |
| | 341553-68-2P | 341553-69-3P | 341553-70-6P | 341990-72-5P | 341990-73-6P |
| | 341990-74-7P | 341990-75-8P | 341990-76-9P | 341990-77-0P | 341990-78-1P |
| | 341990-82-7P | 341990-83-8P | 341990-84-9P | 341990-85-0P | 341990-86-1P |
| | 341990-87-2P | 341990-88-3P | 341990-89-4P | 341990-90-7P | 341990-91-8P |
| | 341990-92-9P | 341990-93-0P | 341990-95-2P | 341990-97-4P | 341991-01-3P |
| | 342393-40-2P | 342395-76-0P | 342395-83-9P | 342395-94-2P | 342396-85-4P |
| | 342398-02-1P | 342398-29-2P | 342398-57-6P | | |

RL: PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(multifunctional delivery vehicles for selective cellular targeting of drugs)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 197245-25-3P | 341549-54-0P | 341549-55-1P | 341549-56-2P | 341549-57-3P |
| | 341549-58-4P | 341549-59-5P | 341549-60-8P | 341549-61-9P | 341549-62-0P |
| | 341549-63-1P | 341549-74-4P | 341549-76-6P | 341549-78-8P | 341549-79-9P |
| | 341549-80-2P | 341549-81-3P | 341549-82-4P | 341549-83-5P | 341549-84-6P |
| | 341549-85-7P | 341549-86-8P | | | |

RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 51-67-2 2495-35-4 3326-32-7 3588-30-5 110914-51-7 121031-01-4
 178623-11-5 341549-28-8 341549-30-2 341549-33-5 341549-39-1
 341549-73-3
 RL: RCT (Reactant)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 5621-44-3P 173039-08-2P 341549-29-9P 341549-31-3P 341549-32-4P
 341549-34-6P 341549-36-8P 341549-37-9P 341549-38-0P 341549-40-4P
 341549-69-7P 341549-70-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 341549-72-2P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 341549-41-5 341549-42-6 341549-43-7 341549-44-8 341549-45-9
 341549-46-0 341549-47-1 341549-48-2 341549-49-3 341549-50-6
 341549-51-7 341549-64-2 341549-65-3 341549-66-4 341549-67-5
 341549-68-6 341549-77-7 341990-71-4 342392-74-9 342393-39-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 9001-78-9, Alkaline phosphatase
 RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (placental type; multifunctional delivery vehicles for selective cellular targeting of drugs)
 IT 38048-32-7
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (receptors; multifunctional delivery vehicles for selective cellular targeting of drugs)

L10 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:194822 CAPLUS
 DN 134:223461
 TI Polythioethers having pendant hydroxymethyl groups with good hydrophilicity, dyeability, and solvent solubility, and their manufacture
 IN Miuwa, Yoshiyuki; Kunimura, Masaru
 PA Ube Industries, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08G075-12
 CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 38, 42
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | JP 2001072771 | A2 | 20010321 | JP 1999-252653 | 19990907 |
| AB | [CH ₂ CR ₁ (CH ₂ OH)CH ₂ O(XO) _k CH ₂ CR ₂ (CH ₂ OH)CH ₂ SYmS] _n [k = 0-30; when k= 1, then X] | | | | |

= (un)substituted alkylene, CONHZNHCO, CO; when k = 2-30, then X = CH₂CH₂;

Z = arylene(alkylene), alkylene; Y = arylene, alkylene, divalent heterocycle residue, etc.; m = 0, 1; R₁, R₂ = H, C₁₋₄ alkyl; n .gtoreq.2],

useful for coatings, adhesives, films, etc., are manufd. by polymn. of dioxetanes with dithiols in the presence of onium salts. Thus, 1,4-bis[(3-ethyl-3-oxetanylmethoxy)methyl]benzene was polymd. with bis(4-mercaptophenyl) disulfide in the presence of Ph₄PBr at 150.degree. for 10 h to give polythioether with M_w 24,900 and M_n 8500.

ST hydroxymethylated polythioether manuf coating adhesive film; polymn dioxetane dithiol onium catalyst; phenylphosphonium catalyst polymn dioxetane dithiol; ring opening polymn dioxetane dithiol

IT Onium compounds

RL: CAT (Catalyst use); USES (Uses)
(catalysts; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Adhesives

Coating materials

Plastic films
(manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polythioarylenes

Polythiophenlenes

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polycarbonate-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polythioarylenes

Polythioethers

Polythiophenlenes

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyether-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polycarbonates, preparation

Polyethers, preparation

Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polythioarylene-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polyethers, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polythioether-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polycarbonates, preparation

Polyethers, preparation

Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polythiophenylene-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polythioarylenes

Polythiophenlenes

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyurethane-; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT Polymerization catalysts
(ring-opening; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT 2751-90-8, Tetraphenylphosphonium bromide
RL: CAT (Catalyst use); USES (Uses)
(catalyst; manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT 60763-95-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)
(manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT 329363-98-6P 329363-99-7P 329364-00-3P 329364-01-4P 329364-02-5P
329364-03-6P 329364-04-7P 329364-05-8P 329364-06-9P 329364-07-0P
329364-08-1P 329364-09-2P 329364-10-5P **329364-11-6P**
329364-12-7P 329364-13-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

IT 101-68-8, 4,4'-Diphenylmethane diisocyanate 616-38-6, Dimethyl carbonate
3047-32-3, 3-Ethyl-3-hydroxymethyloxetane
RL: RCT (Reactant)
(manuf. of hydroxymethylated polythioethers for coatings, adhesives, and films)

L10 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2001:166870 CAPLUS
DN 134:306559
TI 7-(4,6-dimethoxypyrimidinyl)oxy- and -thiophthalides as novel herbicides:
part 1. CGA 279 233: a new grass-killer for rice
AU Luthy, Christoph; Zondler, Helmut; Rapold, Thomas; Seifert, Gottfried;
Urwwyler, Bernhard; Heinis, Thomas; Steinrucken, Hans Christian; Allen,
James
CS Syngenta Crop Protection AG, Basel, CH-4002, Switz.
SO Pest Manage. Sci. (2001), 57(3), 205-224
CODEN: PMSCFC; ISSN: 1526-498X
PB John Wiley & Sons Ltd.
DT Journal
LA English
CC 5-3 (Agrochemical Bioregulators)
Section cross-reference(s): 28
AB A series of novel types of 7-(4,6-dimethoxypyrimidin-2-yl)oxy- and -thio-3-methyl-1 (3H)-isobenzofuranones were discovered. From the thio-isobenzofuranyl series, CGA 279233, proposed common name pyriftalid, was chosen for further development as a grass herbicide for use in rice. Synthetic approaches to these new phthalic acid-derived compds. are given,
with emphasis on the synthesis of pyriftalid and its physicochem. behavior.
ST phthalide deriv prepn herbicide
IT Herbicides
(dimethoxypyrimidinyl)oxy- and -thiophthalides)
IT Structure-activity relationship
(herbicidal; of dimethoxypyrimidinyl)oxy- and -thiophthalides)

IT 9027-45-6, Acetolactate synthase
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (dimethoxypyrimidinyl)oxy- and -thiophthalide herbicides as inhibitors
 of)

| | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|
| IT | 135186-68-4 | 135186-70-8 | 135186-82-2 | 135186-83-3 | 135187-16-5 |
| | 135187-19-8 | 135187-22-3 | 135187-38-1 | 135187-46-1 | 135187-56-3 |
| | 135217-15-1 | 148843-74-7 | 154502-20-2 | 180209-30-7 | 304855-54-7 |
| | 304855-55-8 | 304855-56-9 | 304855-57-0 | 304855-67-2 | 304855-69-4 |
| | 304855-71-8 | 304855-72-9 | 304855-73-0 | 304855-74-1 | 304855-75-2 |
| | 304855-76-3 | 335279-15-7 | 335279-16-8 | 335279-17-9 | 335279-18-0 |
| | 335279-20-4 | 335279-21-5 | 335279-22-6 | 335279-23-7 | 335279-24-8 |
| | 335279-25-9 | 335279-26-0 | 335279-27-1 | 335279-28-2 | 335279-29-3 |
| | 335279-30-6 | 335279-31-7 | 335279-32-8 | 335279-33-9 | 335279-34-0 |
| | 335279-35-1 | 335279-36-2 | 335279-37-3 | 335279-38-4 | 335279-39-5 |
| | 335279-41-9 | 335279-42-0 | 335279-43-1 | 335279-44-2 | 335279-45-3 |
| | 335279-46-4 | 335279-47-5 | 335279-48-6 | 335279-49-7 | 335279-50-0 |
| | 335279-51-1 | 335279-52-2 | 335279-53-3 | 335279-54-4 | 335279-55-5 |
| | 335279-56-6 | 335279-57-7 | 335279-58-8 | 335279-59-9 | 335279-60-2 |
| | 335279-61-3 | | | | |

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BIOL (Biological study); USES (Uses)
 (herbicidal and acetolactate-synthetase-inhibiting activity of)

| | | | | |
|----|--------------|---------------|---|---------------------|
| IT | 3400-31-5P | 13619-67-5P | 13619-70-0P, 2-Acetyl-6-nitrobenzoic acid | |
| | 30991-02-7P | 135217-37-7P, | 7-Mercapto-3-methylphthalide | 146516-73-6P |
| | 148843-77-0P | 335279-63-5P | 335279-64-6P | 335279-65-7P |
| | 335279-66-8P | 335279-67-9P | 335279-68-0P | |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (intermediate in prepn. of dimethoxypyrimidinylthiophthalide
 herbicides)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 135186-78-6P | 136192-69-3P | 304855-68-3P | 304855-70-7P | 304855-77-4P |
| | 304855-78-5P | 335279-40-8P | | | |

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. and herbicidal and acetolactate-synthetase-inhibiting activity
 of)

RE.CNT 66

RE

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L10 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2000:881172 CAPLUS
DN 134:46794
TI A compound containing a labile disulfide bond
IN Wolff, Jon A.
PA Mirus Corporation, USA
SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07H021-02

ICS C07H021-04; C07K001-00; A01N037-18; A01N043-04

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 25

FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--------------|--------------|-----------------|--------------|
| PI | WO 2000075162 | A1 | 20001214 | WO 2000-US15652 | 20000607 |
| | W: JP | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 1102784 | A1 | 20010530 | EP 2000-939635 | 20000607 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI | US 1999-137859 | P | 19990607 | | |
| | WO 2000-US15652 | W | 20000607 | | |
| AB | A labile disulfide-contg. compd. under physiol. conditions, comprises: | | | | |
| | the | | | | |
| | disulfide-contg. compd. having a labile disulfide bond that is either a disulfide bond that is cleaved more rapidly than oxidized glutathione or | | | | |
| a | a disulfide bond constructed from thiols in which one of the constituent thiols has a lower pKa than glutathione or a disulfide bond that is activated by intramol. attack from a free thiol. Di-Me 5,5'-dithiobis(2-nitrobenzoate)propionimidate-2HCl was prep'd. and a complex was formed between this compd., DNA and polylysine. | | | | |
| ST | disulfide bond compd polymer delivery cell | | | | |
| IT | Disulfide group | | | | |
| | Drug delivery systems | | | | |
| | Transformation, genetic | | | | |
| | (compd. contg. a labile disulfide bond for polymer delivery to cells) | | | | |
| IT | Nucleotides, biological studies | | | | |
| | Peptides, biological studies | | | | |
| | RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | | |
| | (compd. contg. a labile disulfide bond for polymer delivery to cells) | | | | |
| IT | DNA | | | | |
| | RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) | | | | |
| | (complexes; compd. contg. a labile disulfide bond for polymer delivery to cells) | | | | |
| IT | Plasmid vectors | | | | |
| | (pCI Luc; compd. contg. a labile disulfide bond for polymer delivery to | | | | |
| | cells) | | | | |
| IT | 56-89-3D, L-Cystine, complex with DNA and disulfides, biological studies | | | | |
| | RL: BPR (Biological process); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) | | | | |
| | (compd. contg. a labile disulfide bond for polymer delivery to cells) | | | | |
| IT | 56-89-3, L-Cystine, reactions 69-78-3, 5,5'-Dithiobis(2-nitrobenzoic acid) 109-78-4, 3-Hydroxypropionitrile 627-18-9 1738-25-6, 3-Dimethylaminopropionitrile 6066-82-6, N-Hydroxysuccinimide 25104-18-1, Polylysine 38000-06-5, Polylysine 52328-05-9, O-Methylisourea hydrogen sulfate 289888-14-8D, complex with 1,4-bis(3-aminopropyl)piperazine 289888-14-8D, complex with DNA and cystine | | | | |
| | RL: RCT (Reactant) | | | | |
| | (compd. contg. a labile disulfide bond for polymer delivery to cells) | | | | |
| IT | 10389-65-8P | 13551-09-2P | 60129-38-6P | 289888-07-9P | 289888-08-0P |
| | 289888-09-1P | 289888-10-4P | 289888-11-5P | 289888-12-6P | 289888-15-9P |

313056-27-8P 313056-28-9P 313056-29-0P 313056-31-4P
313056-32-5P 313056-33-6P 313056-34-7DP, complex with DNA and pCI Luc
313056-34-7P 313056-35-8P 313056-36-9P 313056-37-0DP, complexes

with

DNA 313056-37-0P 313056-38-1P 313056-39-2P 313056-40-5P
313056-41-6DP, complex with DNA and pCI Luc
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(compd. contg. a labile disulfide bond for polymer delivery to cells)

IT 25104-18-1DP, Polylysine, complexes with DNA and disulfides
38000-06-5DP, Polylysine, complexes with DNA and disulfides
289888-09-1DP, complex with DNA and pCI Luc 289888-10-4DP, complex with
DNA and pCI Luc 289888-11-5DP, complex with DNA and pCI Luc
289888-12-6DP, complex with DNA and pCI Luc 313056-28-9DP, complex with
DNA and polylysine
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(compd. contg. a labile disulfide bond for polymer delivery to cells)

RE.CNT 5

RE

- (1) Bergstrom; US 4983727 1991 CAPLUS
- (2) Grinstaff; US 5639473 A 1997 CAPLUS
- (3) Pastan; US 5747654 A 1998 CAPLUS
- (4) Westling; US 5700921 A 1997 CAPLUS
- (5) Zara; US 5157123 A 1992 CAPLUS

L10 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 2000:607709 CAPLUS

DN 133:321682

TI Bis[2-(Acylamino)phenyl] Disulfides, 2-(Acylamino)benzenethiols, and
S-[2-(Acylamino)phenyl] Alkanethioates as Novel Inhibitors of Cholesteroyl
Ester Transfer Protein

AU Shinkai, Hisashi; Maeda, Kimiya; Yamasaki, Takahiro; Okamoto, Hiroshi;
Uchida, Itsuo

CS Central Pharmaceutical Research Institute, JT Inc., Osaka, 569-1125,
Japan

SO Journal of Medicinal Chemistry (2000), 43(19), 3566-3572
CODEN: JMCMAR; ISSN: 0022-2623

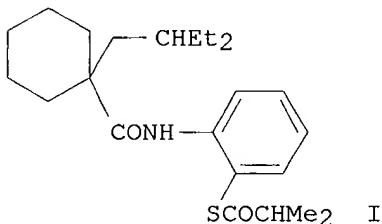
PB American Chemical Society

DT Journal

LA English

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1

GI



AB A series of bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, S-[2-(acylamino)phenyl] alkanethioates, and

related compds. were synthesized, and their inhibitory effect on cholesteryl ester transfer protein activity in human plasma was evaluated.

This study elucidated the structural requirements for inhibitory activity and detd. that the optimum compd. was I (JTT-705). I achieved 50% inhibition of CETP activity in human plasma at a concn. of 9 .mu.M and 95% inhibition of CETP activity in male Japanese white rabbits at an oral dose of 30 mg/kg. It increased the plasma HDL cholesterol level by 27 and 54%, resp., when given at oral doses of 30 or 100 mg/kg once a day for 3 days to male Japanese white rabbits.

ST acylaminophenyl disulfide prepn CETP inhibition; alkanethioate acylaminophenyl prepn CETP inhibition; acylaminobenzenethiol prepn CETP inhibition; cholesteryl ester transfer protein inhibitor arylamide

IT Proteins, specific or class

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (cholesterol ester-exchanging; bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, and S-[2-(acylamino)phenyl] alkanethioates as inhibitors of)

IT 135-57-9P 4490-97-5P 117137-42-5P 187744-28-1P 211513-18-7P
211513-21-2P 211513-23-4P 211513-96-1P 211513-97-2P 211513-99-4P
303054-94-6P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);

SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, and S-[2-(acylamino)phenyl] alkanethioates as inhibitors of cholesteryl ester transfer protein)

IT 2527-60-8P 143790-61-8P 211513-26-7P 211513-27-8P 211513-28-9P
211513-37-0P 211513-70-1P 211513-71-2P 211514-21-5P 292826-14-3P
303054-95-7P **303054-96-8P** 303054-97-9P 303054-98-0P
303054-99-1P 303055-00-7P 303055-03-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, and S-[2-(acylamino)phenyl] alkanethioates as inhibitors of cholesteryl ester transfer protein)

IT 79-30-1, Isobutyryl chloride 95-55-6, 2-Aminophenol 98-89-5, Cyclohexanecarboxylic acid 103-80-0, Phenylacetyl chloride 119-80-2, 2,2'-Dithiobis[benzoic acid] 1123-25-7, 1-Methylcyclohexanecarboxylic acid 1141-88-4, 2,2'-Dithiobis[aniline] 2890-61-1, 1-Methylcyclohexanecarbonyl chloride 3814-34-4, 1-Bromo-2-ethylbutane

RL: RCT (Reactant)

(bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, and S-[2-(acylamino)phenyl] alkanethioates as inhibitors of cholesteryl ester transfer protein)

IT 303055-05-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (bis[2-(acylamino)phenyl] disulfides, 2-(acylamino)benzenethiols, and S-[2-(acylamino)phenyl] alkanethioates as inhibitors of cholesteryl ester transfer protein)

RE.CNT 15

RE

(1) Bhatnagar, D; Atherosclerosis 1993, V98, P25 MEDLINE

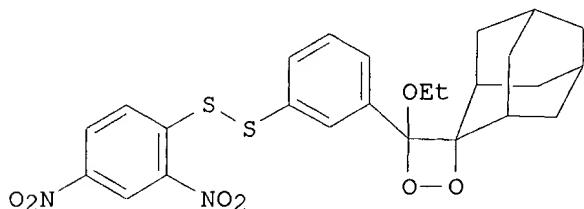
(2) Bruce, C; Annu Rev Nutr 1998, V18, P297 CAPLUS

(3) Connolly, D; Biochem Biophys Res Commun 1996, V223, P42 CAPLUS

(4) Fielding, C; J Clin Invest 1996, V97, P2687 CAPLUS
 (5) Fielding, C; J Lipid Res 1995, V36, P211 CAPLUS
 (6) Foger, B; J Mol Med 1995, V73, P369 MEDLINE
 (7) Hayek, T; J Clin Invest 1995, V96, P2071 CAPLUS
 (8) Kothari, H; Atherosclerosis 1997, V128, P59 CAPLUS
 (9) Lagrost, L; Biochem Biophys Acta 1994, V1215, P209 CAPLUS
 (10) Marotti, K; Nature 1993, V364, P73 CAPLUS
 (11) Morton, R; J Biol Chem 1983, V258, P11751 CAPLUS
 (12) Okamoto, H; Nature 2000, V406, P203 CAPLUS
 (13) Quinet, E; J Clin Invest 1991, V87, P1559 CAPLUS
 (14) Tall, A; J Lipid Res 1993, V34, P1255 CAPLUS
 (15) Zhong, S; J Clin Invest 1996, V97, P2917 CAPLUS

L10 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:535112 CAPLUS
 DN 133:150547
 TI Preparation of spiro[1,2-dioxetane-3,2'-adamantane] derivatives as chemiluminescent reagents for determination of thiols and acetylcholinesterase
 IN Grassi, Jacques; Sabelle, Stephane; Renard, Pierre-Yves
 PA Commissariat a l'Energie Atomique, Fr.
 SO PCT Int. Appl., 51 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM C07D
 CC 28-4 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 9
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| PI WO 2000044719 | A2 | 20000803 | WO 2000-FR183 | 20000127 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2789075 | A1 | 20000804 | FR 1999-949 | 19990128 |
| FR 2789075 | B1 | 20010302 | | |
| PRAI FR 1999-949 | A | 19990128 | | |
| OS CASREACT 133:150547; MARPAT 133:150547 | | | | |
| GI | | | | |



II

AB R3SZZ1CRR1OOCRR4R5 [I; RR = bond; R1 = H, alkyl, alkoxy, aryl(oxy), etc.; R3 = substituted Ph or -polyarom. group (sic); R4,R5 = alkyl or aryl;
 R4R5 = atoms to complete a (poly)cycloalkyl group or -(polycyclic) aryl group;

$Z = O$ or S ; $Z_1 =$ (un)substituted arylene] were prepd. Thus, 3-IC₆H₄CO₂Et was thiolated by Bu₃SnCMe₃ (prepn. each given) and the product condensed with 2-adamantanone to give 3-(Me₃CS)C₆H₄C(:X)OEt ($X =$ 2-adamantylidene) which was S-thiolated by 2,4-(O₂N)C₆H₃SCl to give, after ozonation, title compd. II. Anal. use of I was demonstrated.

ST spirodioxetaneadamantane prepn chemiluminescent reagent; detn thiol acetylcholinesterase spirodioxetaneadamantane prepn

IT Chemiluminescence spectroscopy
Chemiluminescent substances

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

IT Thiols (organic), analysis

RL: ANT (Analyte); ANST (Analytical study)

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

IT 625-00-3, Thiocholine 9000-81-1, Acetylcholinesterase

RL: ANT (Analyte); ANST (Analytical study)

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

IT 287171-81-7P 287171-83-9P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

IT 75-66-1, tert-Butylthiol 528-76-7, 2,4-Dinitrobenzenesulfenyl chloride 700-58-3, 2-Adamantanone 1461-22-9, Tributyltin chloride 18162-48-6, tert-Butyldimethylsilyl chloride 19438-10-9, Methyl 3-hydroxybenzoate 24398-88-7, Ethyl 3-bromobenzoate

RL: RCT (Reactant)

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

IT 23728-82-7P 58313-23-8P, Ethyl 3-iodobenzoate 111807-81-9P

120687-94-7P 121445-45-2P 287171-78-2P 287171-79-3P 287171-80-6P
287171-82-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of spiro[1,2-dioxetane-3,2'-adamantane] derivs. as chemiluminescent reagents for detn. of thiols and acetylcholinesterase)

=> d his

(FILE 'HOME' ENTERED AT 10:39:29 ON 11 JAN 2002)

FILE 'REGISTRY' ENTERED AT 10:39:37 ON 11 JAN 2002

L1 STRUCTURE UPLOADED

L2 50 S L1

L3 839 S (LINKER)

FILE 'REGISTRY' ENTERED AT 10:43:24 ON 11 JAN 2002

L4 0 S L2 AND LINKER

L5 0 S L2 AND LINK

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FILE 'REGISTRY' ENTERED AT 10:45:18 ON 11 JAN 2002
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    DEL SEL Y
    SEL L2 47 RN
L6      1 S E1/RN
        SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 10:45:24 ON 11 JAN 2002
L7      1 S L6

FILE 'REGISTRY' ENTERED AT 10:46:06 ON 11 JAN 2002
    SET TERMSET E#
    DEL SEL Y
    SEL L2 31 RN
L8      1 S E1/RN
        SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 10:46:12 ON 11 JAN 2002
L9      1 S L8

FILE 'CAPLUS' ENTERED AT 10:46:42 ON 11 JAN 2002
L10     40 S L2

=> d 110 11-40 all
'L1-999' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

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The following are valid formats:

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ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PAT5 ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
           SCAN must be entered on the same line as the DISPLAY,
           e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, IPC, and NCL

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations

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SIBIB ----- IBIB, no citations
 HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
 containing hit terms
 HITRN ----- HIT RN and its text modification
 HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

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The following are valid formats:

ABS ----- GI and AB
 ALL ----- BIB, AB, IND, RE
 APPS ----- AI, PRAI
 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers
 CBIB ----- AN, plus Compressed Bibliographic Data
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM
 IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE
 PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
 STD ----- BIB, IPC, and NCL

 IABS ----- ABS, indented with text labels
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IMAX ----- MAX, indented with text labels
 ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):

ENTER DISPLAY FORMAT (BIB):bib

L10 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2001:873232 CAPLUS
DN 136:29244
TI Antiferroelectric liquid crystal composition and liquid crystal element
using it
IN Aihara, Yoshihiko; Mogamiya, Hiroyuki; Yamakawa, Noriko
PA Showa Shell Sekiyu K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
----- ----- ----- -----
PI JP 2001335558 A2 20011204 JP 2000-156521 20000526

=> d 11 11-40 bib
L1 HAS NO ANSWERS
'BIB' IS NOT A VALID STRUCTURE FORMAT KEYWORD
Structure Formats
SIA ----- Structure Image, Attributes, and map table if it contains
data. (Default)
SIM ----- Structure IMage.

SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains data.
SDA ----- All Structure DAta (image, attributes, connection table and map table if it contains data).
NOS ----- NO Structure data.
ENTER STRUCTURE FORMAT (SIM), NOS:
ENTER STRUCTURE FORMAT (SIM), NOS:exit
'EXIT' IS NOT A VALID STRUCTURE FORMAT KEYWORD
Structure Formats
SIA ----- Structure Image, Attributes, and map table if it contains data. (Default)
SIM ----- Structure IMage.
SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains data.
SDA ----- All Structure DAta (image, attributes, connection table and map table if it contains data).
NOS ----- NO Structure data.
ENTER STRUCTURE FORMAT (SIM), NOS:nos
L1 STR

=> d 110 11-40 bib

L10 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2000:318180 CAPLUS
DN 133:73982
TI Ring transformation of 3-(2-oxopropyl)-2(3H)-benzothiazolone in reaction with primary amine
AU Petrova, Katia; Kalcheva, Veneta; Antonova, Antonina
CS "St. Kl. Ohridski" Department of Chemistry I James Bourchier, Sofia University, Sofia, 1164, Bulg.
SO Phosphorus, Sulfur Silicon Relat. Elem. (2000), 158, 67-80
CODEN: PSSLEC; ISSN: 1042-6507
PB Gordon & Breach Science Publishers
DT Journal
LA English
OS CASREACT 133:73982
RE.CNT 26
RE
(1) Abe, T; 1985 CAPLUS
(2) Abe, T; Ensho 1983, V3, P507 CAPLUS
(3) Calis, U; Arzneim-Forsch/Drug Res 1992, V42, P592 CAPLUS
(5) De Kimpe, N; Recl Trav Chem Pays-Bas 1994, V113, P283 CAPLUS
(8) Hetzheim, A; Chem 1970, V10, P385 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2000:198537 CAPLUS
DN 132:333984
TI Synthesis of Heterocyclic Thiosulfonates
AU Prasad, J. V. N. Vara
CS Department of Chemistry, Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company, Ann Arbor, MI, 48106, USA
SO Org. Lett. (2000), 2(8), 1069-1072
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society

DT Journal

LA English

RE.CNT 14

RE

- (1) Clark, R; Synthesis 1991, P871 CAPLUS
- (2) Devlin, T; Synth Commun 1995, V25, P711 CAPLUS
- (3) Gagliardi, S; J Med Chem 1998, V41, P1568 CAPLUS
- (6) Hagen, S; J Med Chem 1997, V40, P3707 CAPLUS
- (7) Kher, S; J Org Chem 1995, V60, P5838 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 2000:191081 CAPLUS

DN 132:236987

TI Preparation of dihydropyrones with tethered heterocycles as HIV protease inhibitors

IN Boyer, Frederick Earl, Jr.; Domagala, John Michael; Ellsworth, Edmund Lee;

Gajda, Christopher Andrew; Hagen, Susan Elizabeth; Lovdahl, Michael James;

Lunney, Elizabeth Ann; Markoski, Larry James; Josyula, Vara Prasad Venkata

Nagendra; Tait, Bradley Dean

PA Warner-Lambert Co., USA; et al.

SO PCT Int. Appl., 282 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2000015634 | A2 | 20000323 | WO 1999-US18986 | 19990818 |
| | WO 2000015634 | A3 | 20001116 | | |
| | W: | AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU; ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 9957802 | A1 | 20000403 | AU 1999-57802 | 19990818 |
| | BR 9913598 | A | 20010529 | BR 1999-13598 | 19990818 |
| | EP 1112269 | A2 | 20010704 | EP 1999-969092 | 19990818 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| PRAI | US 1998-99946 | P | 19980911 | | |
| | WO 1999-US18986 | W | 19990818 | | |
| OS | MARPAT | 132:236987 | | | |

L10 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 2000:104823 CAPLUS

DN 132:273836

TI 5,6-Dihydropyran-2-ones Possessing Various Sulfonyl Functionalities: Potent Nonpeptidic Inhibitors of HIV Protease

AU Boyer, Frederick E.; Prasad, J. V. N. Vara; Domagala, John M.; Ellsworth, Edmund L.; Gajda, Christopher; Hagen, Susan E.; Markoski, Larry J.; Tait, Bradley D.; Lunney, Elizabeth A.; Palovsky, Alexander; Ferguson, Donna; Graham, Neil; Holler, Tod; Hupe, Donald; Nouhan, Carolyn; Tummino, Peter

J.; Urumov, A.; Zeikus, Eric; Zeikus, Greg; Gracheck, Stephen J.;
Sanders, James M.; VanderRoest, Steven; Brodfuehrer, Joanne; Iyer, Krishna; Sinz,
Michael; Gulnik, Sergei V.; Erickson, John W.
CS Departments of Chemistry Biochemistry Infectious Diseases and PDM,
Parke-Davis Pharmaceutical Research Division of Warner-Lambert Company,
Ann Arbor, MI, 48105, USA
SO J. Med. Chem. (2000), 43(5), 843-858
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
RE.CNT 31
RE
(1) Barry, M; Clin Pharmacokinet 1997, V32, P194 CAPLUS
(3) Carpenter, M; J Org Chem 1951, P586 CAPLUS
(4) Chiba, M; Drug Metab Dispos 1996, V24, P307 CAPLUS
(5) Deeks, S; J Am Med Assoc 1997, V277, P145 CAPLUS
(6) Erickson, J; Nature Struct Biol 1995, V2, P523 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 2000:71430 CAPLUS
DN 132:194265
TI Nonpeptidic HIV protease inhibitors possessing excellent antiviral
activities and therapeutic indices. PD 178390: a lead HIV protease
inhibitor
AU Prasad, J. V. N. Vara; Boyer, Frederick E.; Domagala, John M.; Ellsworth,
Edmund L.; Gajda, Christopher; Hamilton, Harriet W.; Hagen, Susan E.;
Markoski, Larry J.; Steinbaugh, Bruce A.; Tait, Bradley D.; Humblet,
Christine; Lunney, Elizabeth A.; Pavlovsky, Alexander; Rubin, John R.;
Ferguson, Donna; Graham, Neil; Holler, Tod; Hupe, Donald; Nouhan,
Carolyn;
Tummino, Peter J.; Urumov, A.; Zeikus, Eric; Zeikus, Greg; Gracheck,
Stephen J.; Saunders, James M.; VanderRoest, Steven; Brodfuehrer, Joanne;
Iyer, K.; Sinz, M.; Gulnik, Sergei V.; Erickson, John W.
CS Department of Chemistry, Parke-Davis Pharmaceutical Research, Division of
Warner-Lambert Company, Ann Arbor, MI, 48105, USA
SO Bioorg. Med. Chem. (1999), 7(12), 2775-2800
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Science Ltd.
DT Journal
LA English
RE.CNT 40
RE
(1) Buckheit, R; Antiviral Res 1993, V21, P247 CAPLUS
(2) Chiba, M; Drug Metab Dispos 1996, V24, P307 CAPLUS
(4) Deeks, S; JAMA 1997, V277, P145 CAPLUS
(6) Erickson, J; Nature Structural Biology 1995, V2, P523 CAPLUS
(7) Eyermann, C; Advances in Amino Acid Mimetics and Peptidomimetics 1997, V1,
P1 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1999:811208 CAPLUS
DN 132:49889
TI Preparation of benzamide thiolesters, disulfides, benzisothiazolones, and
related compounds as inactivators of zinc finger containing retroviruses.

IN Turpin, Jim A.; Song, Yongsheng; Inman, John K.; Huang, Mingjun;
Wallqvist, Anders; Maynard, Andrew; Covell, David G.; Rice, William G.;
Appella, Ettore

PA United States of America, Department of Health and Human Services, USA

SO PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|-----------|----------|-----------------|----------|
| PI | WO 9965871 | A2 | 19991223 | WO 1999-US13856 | 19990618 |
| | WO 9965871 | A3 | 20001123 | | |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9946972 | A1 | 20000105 | AU 1999-46972 | 19990618 |
| | BR 9911385 | A | 20010313 | BR 1999-11385 | 19990618 |
| | EP 1087941 | A2 | 20010404 | EP 1999-930428 | 19990618 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| PRAI | US 1998-89842 | P | 19980619 | | |
| | WO 1999-US13856 | W | 19990618 | | |
| OS | MARPAT | 132:49889 | | | |

L10 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1999:525807 CAPLUS

DN 131:266146

TI Molecular assembly and micellization of molybdenum(V,IV) thiolate and selenolate complexes with long hydrocarbon chains

AU Okamura, Taka-Aki; Taniuchi, Kaku; Ueyama, Norikazu; Nakamura, Akira
CS Department of Macromolecular Science, Graduate School of Science, Osaka University, Osaka, 560-0043, Japan

SO Polym. J. (Tokyo) (1999), 31(8), 651-657

CODEN: POLJB8; ISSN: 0032-3896

PB Society of Polymer Science, Japan

DT Journal

LA English

RE.CNT 28

RE

(1) Baena, M; J Am Chem Soc 1994, V116, P1899 CAPLUS

(2) Baxter, D; J Am Chem Soc 1994, V116, P4551 CAPLUS

(3) Boyd, I; Aust J Chem 1978, V31, P279 CAPLUS

(6) Dance, I; Aust J Chem 1978, V31, P519 CAPLUS

(7) Ghadiri, M; J Am Chem Soc 1992, V114, P4000 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1999:506347 CAPLUS

DN 132:137146

TI Syntheses of 1-amino-2-(4-chloro-2-mercaptopbenzenesulfonyl)guanidine derivatives with potential pharmacological activity

AU Pomarnacka, Elzbieta; Kornicka, Anita
CS Department of Chemical Technology of Drugs, Medical University of Gdansk,
Gdansk, 80-416, Pol.
SO Acta Pol. Pharm. (1999), 56(2), 143-153
CODEN: APPHAX; ISSN: 0001-6837
PB Polish Pharmaceutical Society
DT Journal
LA English
RE.CNT 15
RE
(1) Artico, M; Il Farmaco 1996, V51, P305 CAPLUS
(2) Baumgarth, M; J Med Chem 1997, V40, P2017 CAPLUS
(4) Brzozowski, Z; Acta Polon Pharm 1984, V41, P133 CAPLUS
(5) Brzozowski, Z; Acta Polon Pharm 1985, V42, P313 CAPLUS
(6) Brzozowski, Z; Acta Polon Pharm - Drug Research 1998, V55, P49 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1999:506346 CAPLUS
DN 132:137328
TI Syntheses of some
2-hydroxy-1-[(4-chloro-2-mercaptophenyl)sulfonyl]imidazole
derivatives with potential anticancer activity
AU Brzozowski, Zdzislaw; Kornicka, Anita
CS Department of Chemical Drug Technology, Medical University of Gdansk,
Gdansk, 80-416, Pol.
SO Acta Pol. Pharm. (1999), 56(2), 135-142
CODEN: APPHAX; ISSN: 0001-6837
PB Polish Pharmaceutical Society
DT Journal
LA English
RE.CNT 14
RE
(4) Brzozowski, Z; Acta Polon Pharm - Drug Research 1995, V52, P91 CAPLUS
(5) Brzozowski, Z; Acta Polon Pharm - Drug Research 1996, V53, P269 CAPLUS
(6) Brzozowski, Z; Acta Polon Pharm - Drug Research 1997, V54, P293 CAPLUS
(7) Brzozowski, Z; Acta Polon Pharm - Drug Research 1998, V55, P233 CAPLUS
(8) Brzozowski, Z; Acta Polon Pharm - Drug Research 1998, V55, P375 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1999:421985 CAPLUS
DN 131:214038
TI Sodium selenoborate for reduction of arylsulfonyl chlorides, sodium
arylsulfinate, and aryl arylsulfonates
AU Zhuang, Meihua; Yu, Biyu; Shao, Jianguo
CS Department of Chem. and Chem. Engin., Yangzhou Univ., Yangzhou, 225002,
Peop. Rep. China
SO Yangzhou Daxue Xuebao, Ziran Kexueban (1999), 2(2), 19-21
CODEN: YDXKFT; ISSN: 1007-824X
PB Yangzhou Daxue Xuebao Bianjibu
DT Journal
LA Chinese

L10 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1999:354463 CAPLUS
DN 131:5528
TI A solid-phase technology for the preparation of combinatorial libraries

through amide-bond anchoring

IN Johnson, Tony; Quibell, Martin; Howe, Joanne

PA Peptide Therapeutics Limited, UK

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9926902 | A1 | 19990603 | WO 1998-GB3523 | 19981126 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, | | | | |
| TM | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9913420 | A1 | 19990615 | AU 1999-13420 | 19981126 |
| | AU 734992 | B2 | 20010628 | | |
| | EP 1034154 | A1 | 20000913 | EP 1998-956988 | 19981126 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, | | | | |
| FI | JP 2001524457 | T2 | 20011204 | JP 2000-522063 | 19981126 |
| PRAI | GB 1997-24853 | A | 19971126 | | |
| | GB 1998-8744 | A | 19980425 | | |
| | WO 1998-GB3523 | W | 19981126 | | |

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RE

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- (3) Johnson, T; WO 9817628 A 1998 CAPLUS
- (4) Lebl, M; WO 9218144 A 1992 CAPLUS

L10 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1998:814205 CAPLUS

DN 130:217595

TI Synthesis and Biological Properties of Novel Pyridinioalkanoyl Thioesters

(PATE) as Anti-HIV-1 Agents That Target the Viral Nucleocapsid Protein Zinc Fingers

AU Turpin, Jim A.; Song, Yongsheng; Inman, John K.; Huang, Mingjun;
Wallqvist, Anders; Maynard, Andrew; Covell, David G.; Rice, William G.;
Appella, Ettore

CS Laboratory of Antiviral Drug Mechanisms and Laboratory of Experimental and

Computational Biology National Cancer Institute-Frederick Cancer Research and Development Center, SAIC Frederick, Frederick, MD, 21702-1201, USA

SO J. Med. Chem. (1999), 42(1), 67-86

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

RE.CNT 51

RE

(1) Aldovini, A; J Virol 1990, V64, P1920 CAPLUS
 (2) Bader, J; Proc Natl Acad Sci U S A 1991, V88, P6740 CAPLUS
 (3) Baggaley, K; J Med Chem 1985, V28, P1661 CAPLUS
 (4) Berg, J; Science 1986, V232, P485 CAPLUS
 (5) Bernstein, F; J Mol Biol 1977, V112, P535 CAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:737260 CAPLUS
 DN 130:95792
 TI 2,2'-Dithiobisbenzamides derived from .alpha.-, .beta.- and .gamma.-amino acids possessing anti-HIV activities: synthesis and structure-activity relationship
 AU Prasad, J. V. N. Vara; Loo, Joseph A.; Boyer, Frederick E.; Stier, Michael
 A.; Gagliotti, Rocco D.; Turner, William J.; Harvey, Patricia J.; Kramer, Melissa R.; Mack, David P.; Scholten, Jefferey D.; Gracheck, Stephen J.; Domagala, John M.
 CS Department of Chemistry, Parke-Davis Pharmaceutical Research, Division of Warner-Lambert Company, Ann Arbor, MI, 48105, USA
 SO Bioorg. Med. Chem. (1998), 6(10), 1707-1730
 CODEN: BMECEP; ISSN: 0968-0896
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 RE.CNT 38
 RE
 (1) Aldovini, A; J Virol 1990, V64, P1920 CAPLUS
 (2) Buckheit, R; Antiviral Res 1993, V21, P247 CAPLUS
 (4) Darlix, J; C R Acad Sci III 1993, V316, P763 CAPLUS
 (5) Darlix, J; J Mol Biol 1995, V254, P523 CAPLUS
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 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:672509 CAPLUS
 DN 129:275693
 TI Preparation of aromatic and heterocyclic nitrato derivatives as vasodilators
 IN Haj-Yehia, Abdullah
 PA Yissum Research Development Company of the Hebrew, Israel
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|--|----------|-----------------|----------|
| PI | WO 9842661 | A1 | 19981001 | WO 1998-IL144 | 19980326 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | AU 9865160 | A1 | 19981020 | AU 1998-65160 | 19980326 |

| | | | | |
|--|----|----------|----------------|----------|
| EP 984928 | A1 | 20000315 | EP 1998-910963 | 19980326 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI | | | | |
| JP 2001520670 | T2 | 20011030 | JP 1998-545375 | 19980326 |
| PRAI IL 1997-120531 | A | 19970326 | | |
| WO 1998-IL144 | W | 19980326 | | |

L10 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1998:561795 CAPLUS
DN 129:244780
TI Photochemical Reactions between C60 and Aromatic Thiols. Protonation of C60 via Photoinduced Electron Transfer
AU Alam, Maksudul M.; Sato, Masahiro; Watanabe, Akira; Akasaka, Takeshi;
Ito,
Osamu
CS Institute for Chemical Reaction Science, Tohoku University, Katahira
Sendai, 980-8577, Japan
SO J. Phys. Chem. A (1998), 102(38), 7447-7451
CODEN: JPCAFH; ISSN: 1089-5639
PB American Chemical Society
DT Journal
LA English

L10 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1998:424091 CAPLUS
DN 129:95502
TI Preparation of fungicidal quinazolinones
IN Bellina, Russell Frank; Bereznak, James Francis; Christensen, Joel
Robert;
Chang, Zen-Yu; Fawzi, Maged Mohamed; Marshall, Eric Allen; Moberg,
William
Karl; Rorer, Morris Padgett; Sternberg, Charlene Gross; Walker, Michael
Paul; Zimmerman, William Thomas
PA E.I. Du Pont de Nemours and Co., USA
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|-----------|---|-----------------|----------|
| PI | WO 9826664 | A1 | 19980625 | WO 1997-US22779 | 19971215 |
| | | W: | AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK,
MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | | RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
GA, GN, ML, MR, NE, SN, TD, TG | | |
| | AU 9853803 | A1 | 19980715 | AU 1998-53803 | 19971215 |
| | EP 946095 | A1 | 19991006 | EP 1997-950927 | 19971215 |
| | | R: | CH, DE, FR, GB, IT, LI | | |
| PRAI | US 1996-33657 | P | 19961217 | | |
| | US 1997-41964 | P | 19970403 | | |
| | WO 1997-US22779 | W | 19971215 | | |
| OS | MARPAT | 129:95502 | | | |

L10 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1998:323234 CAPLUS
DN 129:16055
TI Preparation of 3-arylthio-6-arylethyl-4-hydroxy-5,6-dihydropyran-2-ones
as antiretrovirals.

IN Boyer, Frederick Earl, Jr.; Domagala, John Michael; Ellsworth, Edmund Lee;
Gajda, Christopher Andrew; Hagen, Susan Elizabeth; Hamilton, Harriet Wall;
Markoski, Larry James; Prasad, Josyula Venkata Nagendra Vara; et al.
PA Warner-Lambert Co., USA; Boyer, Frederick Earl, Jr.; Domagala, John Michael; Ellsworth, Edmund Lee; Gajda, Christopher Andrew; Hagen, Susan Elizabeth; Hamilton, Harriet Wall
SO PCT Int. Appl., 147 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 9819997 | A2 | 19980514 | WO 1997-US19853 | 19971031 |
| | WO 9819997 | A3 | 19980827 | | |
| | W: | AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, HU, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | US 5834506 | A | 19981110 | US 1997-883743 | 19970627 |
| | AU 9851001 | A1 | 19980529 | AU 1998-51001 | 19971031 |
| | AU 733700 | B2 | 20010524 | | |
| | EP 935597 | A2 | 19990818 | EP 1997-913943 | 19971031 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | BR 9714588 | A | 20000530 | BR 1997-14588 | 19971031 |
| | JP 2001504102 | T2 | 20010327 | JP 1998-521607 | 19971031 |
| | US 6046355 | A | 20000404 | US 1998-124190 | 19980728 |
| | NO 9902103 | A | 19990430 | NO 1999-2103 | 19990430 |
| | KR 2000052951 | A | 20000825 | KR 1999-703824 | 19990430 |
| PRAI | US 1996-29906 | P | 19961101 | | |
| | US 1997-883743 | A | 19970627 | | |
| | WO 1997-US19853 | W | 19971031 | | |
| OS | MARPAT | 129:16055 | | | |

L10 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1998:298262 CAPLUS

DN 129:61897

TI Magnetic recording medium and recording apparatus using same
IN Matsunuma, Satoshi; Hosoe, Yuzuru

PA Hitachi, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------------|------|------|-----------------|------|
|--|------------|------|------|-----------------|------|

PI JP 10124844 A2 19980515 JP 1996-281033 19961023

L10 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1998:147987 CAPLUS
DN 128:205178
TI Electroconductive polymers from Schiff's base monomers end-capped with terminal phenylacetylene groups. II
AU Kim, Il
CS Department Chemical Engineering, University Ulsan, Ulsan, 680-749, S. Korea
SO Polymer (Korea) (1998), 22(1), 64-73
CODEN: POLLDG; ISSN: 0379-153X
PB Polymer Society of Korea
DT Journal
LA Korean

L10 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:684224 CAPLUS
DN 128:8724
TI Photographic element containing recrystallizable 5-pyrazolone photographic coupler
IN Spara, Paul Patrick; Krishnamurthy, Sundaram; Cowan, Stanley Wray; McGarry, Ruthann M.
PA Eastman Kodak Co., USA
SO U.S., 23 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 5677118 | A | 19971014 | US 1996-693938 | 19960510 |
| OS MARPAT | | 128:8724 | | |

L10 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:671222 CAPLUS
DN 127:341374
TI 4-Hydroxy-5,6-dihydropyrones. 2. Potent Non-Peptide Inhibitors of HIV Protease
AU Tait, Bradley D.; Hagen, Susan; Domagala, John; Ellsworth, Edmund; Gajda, Christopher; Hamilton, Harriet; Vara Prasad, J. V. N.; Ferguson, Donna; Graham, Neil; Hupe, Donald; Nouhan, Caroline; Tummino, Peter J.; Humblet, Christine; Lunney, Elizabeth A.; Pavlovsky, Alexander; Rubin, John; Baldwin, Eric T.; Bhat, T. N.; Erickson, John W.; Gulnik, Sergei V.; Liu, Beishan
CS Departments of Chemistry and Biochemistry and Biomolecular Structure and Drug Design, Parke-Davis Pharmaceutical Research Division of the Warner-Lambert Company, Ann Arbor, MI, 48106, USA
SO J. Med. Chem. (1997), 40(23), 3781-3792
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English

L10 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:534077 CAPLUS
DN 127:247878

TI Synthesis and structural characterization of alkyl-substituted
oligo(thio-1,4-phenylene)s
AU Kuhn, Gerhard; Kelm, Jurgen
CS Bundesanstalt Materialforschung -Prufung, Berlin, D-12205, Germany
SO J. Prakt. Chem./Chem.- Ztg. (1997), 339(6), 578-581
CODEN: JPCCEM; ISSN: 0941-1216
PB Barth
DT Journal
LA English

L10 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:503117 CAPLUS

DN 127:190852

TI Process for the preparation of organosilicon disulfide compounds
IN Cohen, Martin Paul; Wideman, Lawson Gibson
PA Goodyear Tire and Rubber Co., USA
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------|------------|----------|-----------------|----------|
| PI | EP 785206 | A1 | 19970723 | EP 1997-100454 | 19970114 |
| | R: BE, DE, FR, GB, IT | | | | |
| | US 5663358 | A | 19970902 | US 1996-589283 | 19960122 |
| | CA 2180888 | AA | 19970723 | CA 1996-2180888 | 19960710 |
| | JP 10001487 | A2 | 19980106 | JP 1997-8522 | 19970121 |
| PRAI | US 1996-589283 | | 19960122 | | |
| OS | MARPAT | 127:190852 | | | |

L10 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1997:453317 CAPLUS

DN 127:154564

TI Silver halide photographic material containing sulfonyl and/or disulfide
compound as fog inhibitor
IN Okada, Hisashi; Asanuma, Naoki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 32 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------------|----------|-----------------|----------|
| PI | JP 09160167 | A2 | 19970620 | JP 1995-315008 | 19951204 |
| OS | MARPAT | 127:154564 | | | |

L10 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2002 ACS

AN 1997:355091 CAPLUS

DN 126:349862

TI Bis[2-(triphenylsilyl)phenyl] disulfide

AU Miller, John R.; Lu, Canzhong; Zheng, Yifan

CS Dep. Biological Chem. Sci., Univ. Essex, Colchesster, CO4 3SQ, UK
SO Acta Crystallogr., Sect. C: Cryst. Struct. Commun. (1997), C53(5),
654-655

CODEN: ACSCEE; ISSN: 0108-2701

PB Munksgaard

DT Journal
LA English

L10 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:275793 CAPLUS
DN 126:343549
TI New pyrrolobenzothiazepine derivatives as molecular probes of the "peripheral-type" benzodiazepine receptor (PBR) binding site
AU Campiani, G.; Nacci, V.; Fiorini, I.; De Filippis, M. P.; Garofalo, A.; Ciani, S. M.; Greco, G.; Novellino, E.; Manzoni, C.; Mennini, T.
CS Dipartimento Farmaco Chimico Tecnologico, Universita di Siena, Siena, 53100, Italy
SO Eur. J. Med. Chem. (1997), 32(3), 241-252
CODEN: EJMCA5; ISSN: 0223-5234
PB Elsevier
DT Journal
LA English

L10 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:228839 CAPLUS
DN 126:311761
TI A new class of anti-HIV-1 agents targeted toward the nucleocapsid protein NCp7: the 2,2'-dithiobisbenzamides
AU Domagala, John M.; Bader, John P.; Gagliotti, Rocco D.; Sanchez, Joseph P.; Stier, Michael A.; Song, Yuntao; Prasad, J.V.N. Vara; Tummino, Peter J.; Scholten, Jeffrey; et al.
CS Division of Warner-Lambert Company, Departments of Chemistry and Therapeutics, Parke-Davis Pharmaceutical Research, Ann Arbor, MI, 48105, USA
SO Bioorg. Med. Chem. (1997), 5(3), 569-579
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier
DT Journal
LA English

L10 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:204498 CAPLUS
DN 126:205418
TI Thermal processing type silver halide photographic material containing a disulfide derivative
IN Okada, Hisashi; Totani, Ichizo; Kojima, Tetsuo
PA Fuji Photo Film Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 09005926 | A2 | 19970110 | JP 1996-85994 | 19960315 |
| PRAI JP 1995-115274 | | 19950418 | | |

L10 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:183782 CAPLUS
DN 126:287661
TI Derivatives of 2-mercaptophenenesulfonamide. XIX. Syntheses, anticancer and anti-HIV activities of some 2-(4-chloro-2-mercaptophenenesulfonylimino)perhydropyrimidines

AU Pomarnacka, Elzbieta
CS Department of Chemical Drug Technology, Medical University of Gdansk,
Gdansk, 80-416, Pol.
SO Acta Pol. Pharm. (1996), 53(5), 373-378
CODEN: APPHAX; ISSN: 0001-6837
PB Polish Pharmaceutical Society
DT Journal
LA English

L10 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2002 ACS
AN 1997:10653 CAPLUS
DN 126:117777
TI The "Thio-Arbuzov" reaction of sulfenate esters with sulphenyl chlorides:
fate of the thiosulfinate product
AU Brown, Charles; Evans, Graham R.
CS Chem. Lab., Univ. Kent Canterbury, Canterbury, CT2 7NH, UK
SO Tetrahedron Lett. (1996), 37(50), 9101-9104
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier
DT Journal
LA English

=> d his

(FILE 'HOME' ENTERED AT 10:39:29 ON 11 JAN 2002)

FILE 'REGISTRY' ENTERED AT 10:39:37 ON 11 JAN 2002

L1 STRUCTURE uploaded
L2 50 S L1
L3 839 S (LINKER)

FILE 'REGISTRY' ENTERED AT 10:43:24 ON 11 JAN 2002

L4 0 S L2 AND LINKER
L5 0 S L2 AND LINK

FILE 'REGISTRY' ENTERED AT 10:45:18 ON 11 JAN 2002

L6 SET TERMSET E#
DEL SEL Y
SEL L2 47 RN
1 S E1/RN
SET TERMSET LOGIN

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L7 1 S L6

FILE 'REGISTRY' ENTERED AT 10:46:06 ON 11 JAN 2002

L8 SET TERMSET E#
DEL SEL Y
SEL L2 31 RN
1 S E1/RN
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 10:46:12 ON 11 JAN 2002

L9 1 S L8

FILE 'CAPLUS' ENTERED AT 10:46:42 ON 11 JAN 2002

L10 40 S L2

=> S L10 AND 1950<=PY<=1997
16455462 1950<=PY<=1997
L11 11 L10 AND 1950<=PY<=1997

=> d 111 1-11 bib

L11 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:684224 CAPLUS
DN 128:8724
TI Photographic element containing recrystallizable 5-pyrazolone
photographic
coupler
IN Spara, Paul Patrick; Krishnamurthy, Sundaram; Cowan, Stanley Wray;
McGarry, Ruthann M.
PA Eastman Kodak Co., USA
SO U.S., 23 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|------|----------|-----------------|--------------|
| US 5677118 | A | 19971014 | US 1996-693938 | 19960510 <-- |
| OS MARPAT 128:8724 | | | | |

L11 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:671222 CAPLUS
DN 127:341374
TI 4-Hydroxy-5,6-dihydropyrones. 2. Potent Non-Peptide Inhibitors of HIV
Protease
AU Tait, Bradley D.; Hagen, Susan; Domagala, John; Ellsworth, Edmund; Gajda,
Christopher; Hamilton, Harriet; Vara Prasad, J. V. N.; Ferguson, Donna;
Graham, Neil; Hupe, Donald; Nouhan, Caroline; Tummino, Peter J.; Humblet,
Christine; Lunney, Elizabeth A.; Pavlovsky, Alexander; Rubin, John;
Baldwin, Eric T.; Bhat, T. N.; Erickson, John W.; Gulnik, Sergei V.; Liu,
Beishan
CS Departments of Chemistry and Biochemistry and Biomolecular Structure and
Drug Design, Parke-Davis Pharmaceutical Research Division of the
Warner-Lambert Company, Ann Arbor, MI, 48106, USA
SO J. Med. Chem. (1997), 40(23), 3781-3792
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English

L11 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:534077 CAPLUS
DN 127:247878
TI Synthesis and structural characterization of alkyl-substituted
oligo(thio-1,4-phenylene)s
AU Kuhn, Gerhard; Kelm, Jurgen
CS Bundesanstalt Materialforschung -Prufung, Berlin, D-12205, Germany
SO J. Prakt. Chem./Chem.- Ztg. (1997), 339(6), 578-581
CODEN: JPCCEM; ISSN: 0941-1216
PB Barth
DT Journal
LA English

L11 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:503117 CAPLUS
 DN 127:190852
 TI Process for the preparation of organosilicon disulfide compounds
 IN Cohen, Martin Paul; Wideman, Lawson Gibson
 PA Goodyear Tire and Rubber Co., USA
 SO Eur. Pat. Appl., 9 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|---------------------|--|---|--|
| PI | EP 785206
R: BE, DE, FR, GB, IT
US 5663358
CA 2180888
JP 10001487 | A1
A
AA
A2 | 19970723
19970902
19970723
19980106 | EP 1997-100454
US 1996-589283
CA 1996-2180888
JP 1997-8522 | 19970114 <--
19960122 <--
19960710 <--
19970121 |
| PRAI | US 1996-589283 | | 19960122 | | |
| OS | MARPAT 127:190852 | | | | |

L11 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:453317 CAPLUS
 DN 127:154564
 TI Silver halide photographic material containing sulfonyl and/or disulfide compound as fog inhibitor
 IN Okada, Hisashi; Asanuma, Naoki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 32 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------|------|----------|-----------------|--------------|
| PI | JP 09160167 | A2 | 19970620 | JP 1995-315008 | 19951204 <-- |
| OS | MARPAT 127:154564 | | | | |

L11 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:355091 CAPLUS
 DN 126:349862
 TI Bis[2-(triphenylsilyl)phenyl] disulfide
 AU Miller, John R.; Lu, Canzhong; Zheng, Yifan
 CS Dep. Biological Chem. Sci., Univ. Essex, Colchesster, CO4 3SQ, UK
 SO Acta Crystallogr., Sect. C: Cryst. Struct. Commun. (1997),
 C53(5), 654-655
 CODEN: ACSCEE; ISSN: 0108-2701
 PB Munksgaard
 DT Journal
 LA English

L11 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:275793 CAPLUS
 DN 126:343549
 TI New pyrrolobenzothiazepine derivatives as molecular probes of the "peripheral-type" benzodiazepine receptor (PBR) binding site
 AU Campiani, G.; Nacci, V.; Fiorini, I.; De Filippis, M. P.; Garofalo, A.;

Ciani, S. M.; Greco, G.; Novellino, E.; Manzoni, C.; Mennini, T.
 CS Dipartimento Farmaco Chimico Tecnologico, Universita di Siena, Siena,
 53100, Italy
 SO Eur. J. Med. Chem. (1997), 32(3), 241-252
 CODEN: EJMCA5; ISSN: 0223-5234
 PB Elsevier
 DT Journal
 LA English

L11 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:228839 CAPLUS
 DN 126:311761
 TI A new class of anti-HIV-1 agents targeted toward the nucleocapsid protein NCp7: the 2,2'-dithiobisbenzamides
 AU Domagala, John M.; Bader, John P.; Gagliotti, Rocco D.; Sanchez, Joseph P.; Stier, Michael A.; Song, Yuntao; Prasad, J.V.N. Vara; Tummino, Peter J.; Scholten, Jeffrey; et al.
 CS Division of Warner-Lambert Company, Departments of Chemistry and Therapeutics, Parke-Davis Pharmaceutical Research, Ann Arbor, MI, 48105, USA
 SO Bioorg. Med. Chem. (1997), 5(3), 569-579
 CODEN: BMECEP; ISSN: 0968-0896
 PB Elsevier
 DT Journal
 LA English

L11 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:204498 CAPLUS
 DN 126:205418
 TI Thermal processing type silver halide photographic material containing a disulfide derivative
 IN Okada, Hisashi; Totani, Ichizo; Kojima, Tetsuo
 PA Fuji Photo Film Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|--------------|
| PI JP 09005926 | A2 | 19970110 | JP 1996-85994 | 19960315 <-- |
| PRAI JP 1995-115274 | | 19950418 | | |

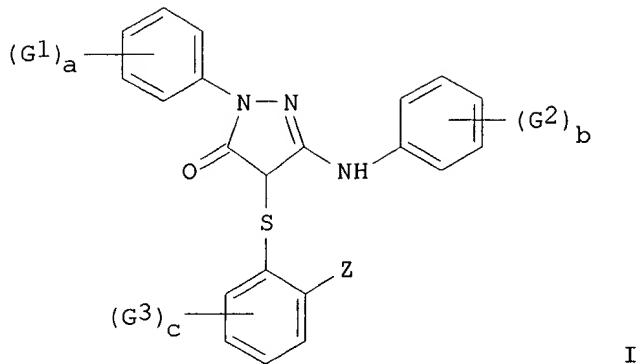
L11 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:183782 CAPLUS
 DN 126:287661
 TI Derivatives of 2-mercaptophenenesulfonamide. XIX. Syntheses, anticancer and anti-HIV activities of some 2-(4-chloro-2-mercaptophenenesulfonylimino)perhydropyrimidines
 AU Pomarnacka, Elzbieta
 CS Department of Chemical Drug Technology, Medical University of Gdansk, Gdansk, 80-416, Pol.
 SO Acta Pol. Pharm. (1996), 53(5), 373-378
 CODEN: APPHAX; ISSN: 0001-6837
 PB Polish Pharmaceutical Society
 DT Journal
 LA English

L11 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:10653 CAPLUS
DN 126:117777
TI The "Thio-Arbuzov" reaction of sulfenate esters with sulphenyl chlorides:
fate of the thiosulfinate product
AU Brown, Charles; Evans, Graham R.
CS Chem. Lab., Univ. Kent Canterbury, Canterbury, CT2 7NH, UK
SO Tetrahedron Lett. (1996), 37(50), 9101-9104
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier
DT Journal
LA English

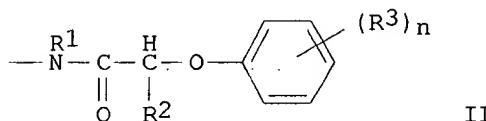
=> d 111 1-11 all

L11 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:684224 CAPLUS
DN 128:8724
TI Photographic element containing recrystallizable 5-pyrazolone
photographic
coupler
IN Spara, Paul Patrick; Krishnamurthy, Sundaram; Cowan, Stanley Wray;
McGarry, Ruthann M.
PA Eastman Kodak Co., USA
SO U.S., 23 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM G03C007-384
NCL 430555000
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|------|----------|-----------------|--------------|
| US 5677118 | A | 19971014 | US 1996-693938 | 19960510 <-- |
| OS MARPAT 128:8724 | | | | |
| GI | | | | |



I



II

AB The invention provides a photog. element comprising a support bearing at least one silver halide emulsion layer having assocd. therewith a 5-pyrazolone photog. coupler represented by the formula I wherein G1-3 are

individually selected from the group consisting of hydrogen, halogen, alkyl, alkoxy, aryloxy, acylamino, alkylthio, arylthio, sulfonamido, sulfamoyl, sulfamido, carbamoyl, diacylamino, alkoxy carbonyl, aryloxycarbonyl, alkoxy sulfonyl, aryloxysulfonyl, alkylsulfonyl, alkylsulfoxyl, arylsulfoxyl, arylsulfonyl, arylsulfonamido, aryloxycarbonylamino, alkylureido, arylureido, acyloxy, nitro, cyano, and carboxy; a and b are individually integers from 0 to 5, provided that the sum of the sigma values for G1 and G2 is at least 1.3; c is an integer from 0 to 4; Z is a group of the formula II wherein R1 is selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, acyl, and heterocyclic groups; R2 is selected from the group consisting of hydrogen and alkyl having from 1 to 16 carbon atoms; and R3 is identically substituted Me or silyl and n is an integer from 1 to 3.

ST recrystallizable pyrazolone photog coupler

IT Photographic couplers

(recrystallizable pyrazolone derivs. as)

IT 101820-00-2P 189939-81-9P 189939-83-1P 198696-51-4P 198696-52-5P

198696-53-6P 198696-55-8P

RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. and reaction in prepn. of pyrazolone photog. coupler)

IT 198696-50-3P 198696-54-7P 198696-56-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. and use as photog. coupler)

IT 96-76-4 615-96-3 1141-88-4 160309-51-3

RL: RCT (Reactant); TEM (Technical or engineered material use); USES (Uses)

(reaction in prepn. of pyrazolone photog. coupler)

DN 127:341374
TI 4-Hydroxy-5,6-dihydropyrones. 2. Potent Non-Peptide Inhibitors of HIV Protease
AU Tait, Bradley D.; Hagen, Susan; Domagala, John; Ellsworth, Edmund; Gajda, Christopher; Hamilton, Harriet; Vara Prasad, J. V. N.; Ferguson, Donna; Graham, Neil; Hupe, Donald; Nouhan, Caroline; Tummino, Peter J.; Humblet, Christine; Lunney, Elizabeth A.; Pavlovsky, Alexander; Rubin, John; Baldwin, Eric T.; Bhat, T. N.; Erickson, John W.; Gulnik, Sergei V.; Liu, Beishan
CS Departments of Chemistry and Biochemistry and Biomolecular Structure and Drug Design, Parke-Davis Pharmaceutical Research Division of the Warner-Lambert Company, Ann Arbor, MI, 48106, USA
SO J. Med. Chem. (1997), 40(23), 3781-3792
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
CC 1-3 (Pharmacology)
Section cross-reference(s): 27
AB The 4-hydroxy-5,6-dihydropyrone template was utilized as a flexible scaffolding from which to build potent active site inhibitors of HIV protease. Dihydropyronone (5,6-dihydro-4-hydroxy-6-phenyl-3-[(2-phenylethyl)thio]-2H-pyran-2-one) (I) was modeled in the active site of HIV protease utilizing a similar binding mode found for the previously reported 4-hydroxybenzopyran-2-ones. Our model led us to pursue the synthesis of 6,6-disubstituted dihydropyrones with the aim of filling S1 and S2 and thereby increasing the potency of the parent dihydropyronone I which did not fill S2. Toward this end we attached various hydrophobic and hydrophilic side chains at the 6-position of the dihydropyronone to mimic the natural and unnatural amino acids known to be effective substrates at P2 and P2'. Parent dihydropyronone I ($IC_{50} = 2100$ nM) was elaborated into compds. with greater than a 100-fold increase in potency

[5-(3,6-dihydro-4-hydroxy-6-oxo-2-phenyl-5-[2-(phenylethyl)thio]-2H-pyran-2-yl)pentanoic acid and
5,6-dihydro-4-hydroxy-6-phenyl-6-(2-phenylethyl)-3-[(2-phenylethyl)thio]-2H-pyran-2-one; $IC = 5$ and 51 nM, resp.].
Optimization of the 3-position fragment to fill S1' and S2' afforded potent HIV protease inhibitor [
3-[(2-tert-butyl-5-methylphenyl)sulfanyl]-
5,6-dihydro-4-hydroxy-6-phenyl-6-(2-phenylethyl)-2H-pyran-2-one, $IC = 10$ nM]. The resulting low mol. wt. compds. (<475) have one or no chiral centers and are readily synthesized.
ST dihydropyronone deriv prepns HIV protease inhibitor; antiviral HIV protease inhibitor mol modeling
IT Anti-AIDS drugs
Antiviral agents
Antiviral structure-activity relationship
Molecular modeling
(mol. modeling and prepns. of 4-hydroxy-5,6-dihydropyrones as inhibitors
of HIV protease)
IT 144114-21-6, Retropepsin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; mol. modeling and prepns. of 4-hydroxy-5,6-dihydropyrones as inhibitors of HIV protease)
IT 137-06-4P 6262-87-9P 6807-50-7P 90927-69-8P 90927-71-2P
169599-78-4P 169599-79-5P 169599-82-0P 169599-83-1P 169600-06-0P

169600-08-2P 169600-09-3P 169600-10-6P 169600-11-7P 169600-12-8P
169600-13-9P 169600-14-0P 169600-15-1P 169600-16-2P 169600-17-3P
169600-19-5P 169600-23-1P 169600-24-2P 169600-25-3P 169600-26-4P
169600-27-5P 169600-28-6P 169600-29-7P 169600-30-0P 169600-31-1P
169600-32-2P 169600-33-3P 169600-34-4P 169600-35-5P 169600-37-7P
169600-45-7P 169600-46-8P 169600-48-0P 169600-49-1P 169600-53-7P
169600-56-0P 169600-58-2P 169600-61-7P 169600-62-8P 169601-06-3P
170914-10-0P 170915-32-9P 170915-39-6P 170915-44-3P 183120-00-5P
183120-05-0P 183120-07-2P 183120-09-4P 183120-11-8P 198123-56-7P
198123-57-8P 198123-58-9P 198123-59-0P 198123-60-3P 198123-61-4P
198123-62-5P 198123-63-6P 198123-64-7P 198123-65-8P 198123-66-9P
198123-67-0P 198123-68-1P 198123-69-2P 198123-70-5P 198123-71-6P
198123-72-7P 198123-73-8P

RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(mol. modeling and prepn. of 4-hydroxy-5,6-dihydropyrones as inhibitors of HIV protease)

IT 70-11-1, .alpha.-Bromoacetophenone 100-61-8, N-Methylaniline, reactions 105-45-3, Methylacetacetate 128-08-5 618-45-1, 3-Isopropylphenol 16601-02-8, Benzyl p-toluenethiosulfonate 53603-17-1 119346-10-0, 3-Benzoylpropionic acid sodium salt 169601-71-2

RL: RCT (Reactant)

(mol. modeling and prepn. of 4-hydroxy-5,6-dihydropyrones as inhibitors of HIV protease)

IT 4151-60-4P 23033-65-0P 32119-53-2P 41479-98-5P 162174-61-0P
169601-32-5P 169601-49-4P 169601-55-2P 169601-59-6P 169601-60-9P
169601-61-0P 169601-63-2P 169601-64-3P 169601-65-4P 169601-66-5P
169601-67-6P 169601-72-3P 169601-73-4P 169601-99-4P 169602-00-0P
169602-01-1P 169602-02-2P 198123-51-2P 198123-52-3P 198123-53-4P
198123-54-5P 198123-55-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(mol. modeling and prepn. of 4-hydroxy-5,6-dihydropyrones as inhibitors of HIV protease)

L11 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:534077 CAPLUS

DN 127:247878

TI Synthesis and structural characterization of alkyl-substituted oligo(thio-1,4-phenylene)s

AU Kuhn, Gerhard; Kelm, Jurgen

CS Bundesanstalt Materialforschung -Prufung, Berlin, D-12205, Germany

SO J. Prakt. Chem./Chem.- Ztg. (1997), 339(6), 578-581

CODEN: JPCCEM; ISSN: 0941-1216

PB Barth

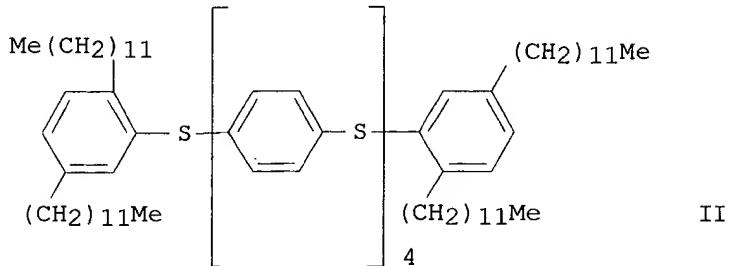
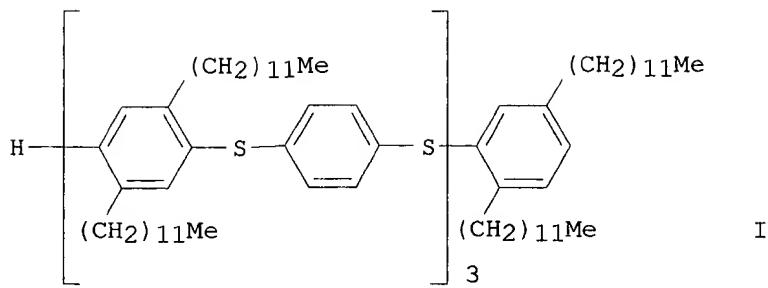
DT Journal

LA English

CC 25-9 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 35

GI



AB Alkyl-substituted oligo(thio-1,4-phenylene)s I and II were prepd. starting

from 1,4-didodecylbenzene.

ST thiophenylene oligomer prep

IT 195822-63-0P 195822-68-5P

RL: BYP (Byproduct); PREP (Preparation)

(prep. of alkyl-substituted oligo(thiophenylene)s)

IT 106-37-6, 1,4-Dibromobenzene 108-98-5, Thiophenol, reactions
3379-81-5

5149-65-5, 1,4-Didodecylbenzene

RL: RCT (Reactant)

(prep. of alkyl-substituted oligo(thiophenylene)s)

IT 79995-41-8P 195822-60-7P 195822-61-8P 195822-62-9P 195822-65-2P
195822-66-3P 195822-67-4P 195822-69-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prep. of alkyl-substituted oligo(thiophenylene)s)

IT 195822-70-9P 195822-74-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prep. of alkyl-substituted oligo(thiophenylene)s)

L11 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:503117 CAPLUS

DN 127:190852

TI Process for the preparation of organosilicon disulfide compounds

IN Cohen, Martin Paul; Wideman, Lawson Gibson

PA Goodyear Tire and Rubber Co., USA

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C07F007-18

CC 29-6 (Organometallic and Organometalloidal Compounds)

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

| | | | | | |
|------|---|--------------|--------------|---------------------|--------------|
| PI | EP 785206 | A1 | 19970723 | EP 1997-100454 | 19970114 <-- |
| | R: BE, DE, FR, GB, IT | | | | |
| | US 5663358 | A | 19970902 | US 1996-589283 | 19960122 <-- |
| | CA 2180888 | AA | 19970723 | CA 1996-2180888 | 19960710 <-- |
| | JP 10001487 | A2 | 19980106 | JP 1997-8522 | 19970121 |
| PRAI | US 1996-589283 | | 19960122 | | |
| OS | MARPAT 127:190852 | | | | |
| AB | The present invention relates to a process for the prepn. of organo silicon disulfide compds. which are useful as adhesion promoters in sulfur-vulcanizable rubber mixts. reinforced with inorg. materials such as | | | | |
| | glass SiO ₂ , aluminosilicates, and carbon black. The process involves reacting a mercaptoalkoxysilane with a sulfenamide compd. Thus, reaction of N-cyclohexyl-2-benzothiazolesulfenamide with 3-mercaptopropyltriethoxysilane gave a mixt. of 2-benzothiazyl-(3-triethoxy)propyl disulfide and bis(3-triethoxysilyl)propyl disulfide. | | | | |
| ST | organo silicon disulfide prepn | | | | |
| IT | Disulfides | | | | |
| | RL: SPN (Synthetic preparation); PREP (Preparation)
(process for prepn. of organosilicon disulfide compds.) | | | | |
| IT | 56706-10-6P, Bis(3-triethoxysilyl)propyl disulfide | | | | |
| | RL: SPN (Synthetic preparation); PREP (Preparation)
(8) | | | | |
| IT | 35112-74-4P, 3,3'-Bis(trimethoxysilylpropyl) disulfide 58392-98-6P,
2,2'-Bis(trimethoxysilylethyl) disulfide 63501-64-4P 64470-10-6P | | | | |
| | 108857-77-8P | 170573-33-8P | 170573-34-9P | 170573-35-0P | 170573-37-2P |
| | 170573-38-3P | 170573-39-4P | 170573-40-7P | 170573-41-8P | 170573-42-9P |
| | 170573-43-0P | 170573-44-1P | 170573-45-2P | 170573-46-3P | 170573-47-4P |
| | 170573-48-5P | 170573-49-6P | 170573-50-9P | 170573-51-0P | 170573-52-1P |
| | 170573-53-2P | 170573-54-3P | 170573-55-4P | 170573-56-5P | 170573-57-6P |
| | 173176-00-6P | 188561-27-5P | 194205-35-1P | 194205-36-2P | 194205-37-3P |
| | 194205-38-4P | 194205-39-5P | 194205-41-9P | 194205-42-0P | 194205-45-3P |
| | 194205-46-4P | 194205-47-5P | 194205-49-7P | 194205-50-0P | 194205-51-1P |
| | 194205-52-2P | 194205-53-3P | 194205-54-4P | 194205-58-8P | 194205-59-9P |
| | 194205-60-2P | 194205-61-3P | 194205-62-4P | 194205-63-5P | 194205-64-6P |
| | 194205-68-0P | 194205-69-1P | 194299-47-3P | 194299-57-5P | 194299-58-6P |
| | 194299-59-7P | 194299-60-0P | 194299-61-1P | 194299-62-2P | |
| | 194299-63-3P | 194299-64-4P | 194299-65-5P | 194299-66-6P | 194299-67-7P |
| | 194299-68-8P | 194299-69-9P | 194299-70-2P | 194299-71-3P | 194299-72-4P |
| | 194299-74-6P | 194299-82-6P | 194299-83-7P | 194299-85-9P | 194299-89-3P |
| | 194299-91-7P | 194299-93-9P | 194299-95-1P | 194299-97-3P | 194299-99-5P |
| | 194300-01-1P | 194300-03-3P | 194300-05-5P | 194300-07-7P | 194300-09-9P |
| | 194300-11-3P | | | | |
| | RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of) | | | | |
| IT | 95-29-4 95-31-8, N-tert-Butyl-2-benzothiazolesulfenamide 2720-65-2
4420-74-0, 3-Mercaptopropyltrimethoxysilane 4979-32-2,
N,N-Dicyclohexyl-2-benzothiazolylsulfenamide 7538-45-6,
2-Mercaptoethyltrimethoxysilane 10220-34-5, N-Isopropyl-2-
benzothiazolylsulfenamide 13818-38-7 13821-71-1 14814-09-6,
3-Mercaptopropyltriethoxysilane 14857-97-7 24056-72-2 27464-39-7
31001-77-1 37592-40-8 58495-78-6, 2-Mercaptoethyltripropoxysilane
58505-63-8 94291-66-4 100080-03-3 141137-15-7 170573-62-3,
2-Mercaptopropyltriethoxysilane 170573-63-4 170573-64-5 170573-65-6
170573-66-7 170573-67-8 170573-68-9 170573-69-0 170573-70-3
170573-71-4 170573-72-5 170573-73-6 170573-74-7 170573-75-8
170573-76-9 170573-77-0 170573-78-1 170573-79-2 170573-80-5 | | | | |

194300-13-5, 2-Mercaptoethyltri-tert-butoxysilane 194300-24-8
 194300-26-0 194300-28-2 194300-30-6 194300-32-8 194300-34-0
 194300-36-2 194300-38-4 194300-40-8 194300-42-0 194300-44-2
 194300-46-4
 RL: RCT (Reactant)
 (process for prepn. of organosilicon disulfide compds.)
 IT 95-33-0, N-Cyclohexyl-2-benzothiazolesulfenamide
 RL: RCT (Reactant)
 (reaction with mercaptoalkylsilanes)

L11 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:453317 CAPLUS
 DN 127:154564
 TI Silver halide photographic material containing sulfonyl and/or disulfide compound as fog inhibitor
 IN Okada, Hisashi; Asanuma, Naoki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 32 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03C001-498
 ICS G03C001-00; G03C001-35
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------|------|----------|-----------------|--------------|
| PI | JP 09160167 | A2 | 19970620 | JP 1995-315008 | 19951204 <-- |
| OS | MARPAT 127:154564 | | | | |

AB The Ag halide photosensitive material contains .gtoreq.1 compd. RSO₂LSO₂CX₁X₂A (I; R = aliph. hydrocarbon, aryl, heterocycle; L = divalent arylene or heterocycle; X₁, X₂ = halo; A = H, halo, electron-attracting group). The heat development photosensitive material contains .gtoreq.1 of I and optionally .gtoreq.1 compd. R₁S₂SnR₂ (R₁, R₂ = aliph. hydrocarbon, aryl, heterocycle; n = 0-4). The materials shows high sensitivity and low fog and provides improved color quality images.
 Thus, a heat development photosensitive film was prep'd. by using a Ag halide emulsion layer contg. p-MeSO₂C₆H₄SO₂CBr₃.
 ST heat developable photog film fog inhibitor; sulfonyl compd photog fog inhibitor; disulfide compd photog fog inhibitor
 IT Photographic fog inhibitors
 (heat-developable photog. film contg. sulfonyl and/or disulfide compd. as fog inhibitor)
 IT Photographic films
 (heat-developable photog. film contg. sulfonyl and/or disulfide compd. as fog inhibitors)
 IT 152171-23-8P, [4-(Phenylthio)phenylthio] acetic acid
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation) (bromination of; prepn. of sulfonyl compd. photog. fog inhibitor)
 IT 187744-20-3 187744-21-4 187744-26-9 193342-81-3 193342-82-4
 193342-83-5 193342-84-6 193342-85-7 193342-86-8
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
 (heat-developable photog. film contg. sulfonyl and/or disulfide compd.

as fog inhibitor)

IT 2527-63-1P 3982-42-1P 4104-52-3P 4490-97-5P 4508-09-2P
 14897-91-7P 52017-43-3P 69200-87-9P 152171-22-7P
187744-16-7P 187744-18-9P 187744-22-5P 187744-23-6P
 187744-24-7P 187744-25-8P 187744-29-2P 187744-31-6P 187744-32-7P
 187744-33-8P 193342-87-9P 193342-88-0P 193342-89-1P 193342-90-4P
 RL: DEV (Device component use); MOA (Modifier or additive use); PNU
 (Preparation, unclassified); PREP (Preparation); USES (Uses)
 (heat-developable photog. film contg. sulfonyl and/or disulfide compd.
 as fog inhibitor)

IT 31183-89-8P, (2,2'-Diamino-5,5'-dichlorodiphenyl)disulfide 31183-91-2P,
 (2,2'-Diamino-5,5'-dimethyldiphenyl)disulfide
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation)
 (prepn. of disulfide compd. photog. fog inhibitor)

IT 62-53-3, Benzenamine, reactions 75-36-5, Acetyl chloride 85-46-1,
 1-Naphthalenesulfonyl chloride 86-84-0, 1-Naphthalene isocyanate
 93-11-8, 2-Naphthalenesulfonyl chloride 95-24-9, 2-Amino-6-
 chlorobenzothiazole 98-09-9, Benzenesulfonyl chloride 98-59-9,
 p-Toluenesulfonyl chloride 98-68-0, p-Methoxybenzenesulfonyl chloride
 98-88-4, Benzoyl chloride 103-71-9, Phenyl isocyanate, reactions
 119-80-2 356-42-3, Pentafluoropropionyl anhydride 722-27-0

773-64-8,
 2-Mesitylenesulfonyl chloride 1141-88-4 2243-83-6,
 2-Naphthalenecarbonyl chloride 2251-50-5, Pentafluorobenzoyl chloride
 2524-64-3 2536-91-6, 2-Amino-6-methylbenzothiazole 15945-07-0,
 2,4,5-Trichlorobenzenesulfonyl chloride
 RL: RCT (Reactant)
 (prepn. of disulfide compd. photog. fog inhibitor)

IT 3926-62-3, Sodium monochloroacetate 52872-99-8,
 4-Phenylthiobenzenethiol
 RL: RCT (Reactant)
 (prepn. of sulfonyl compd. photog. fog inhibitor)

L11 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:355091 CAPLUS
 DN 126:349862
 TI Bis[2-(triphenylsilyl)phenyl] disulfide
 AU Miller, John R.; Lu, Canzhong; Zheng, Yifan
 CS Dep. Biological Chem. Sci., Univ. Essex, Colchesster, CO4 3SQ, UK
 SO Acta Crystallogr., Sect. C: Cryst. Struct. Commun. (1997),
 C53(5), 654-655
 CODEN: ACSCEE; ISSN: 0108-2701
 PB Munksgaard
 DT Journal
 LA English
 CC 75-8 (Crystallography and Liquid Crystals)
 Section cross-reference(s): 29
 AB The title compd., C₄₈H₃₈S₂Si₂, was obtained by the oxidn. of the
 corresponding thiol in the presence of Cu(I) chloride; the mol. structure
 is reported. Crystallog. data are given.
 ST mol structure phenylsilylphenyl sulfide
 IT Crystal structure
 Molecular structure
 (of bis[(triphenylsilyl)phenyl] disulfide)
 IT 117526-60-0, 2-(Triphenylsilyl)benzenethiol
 RL: RCT (Reactant)
 (oxidn. in presence of cuprous chloride of)
 IT **189943-50-8P**

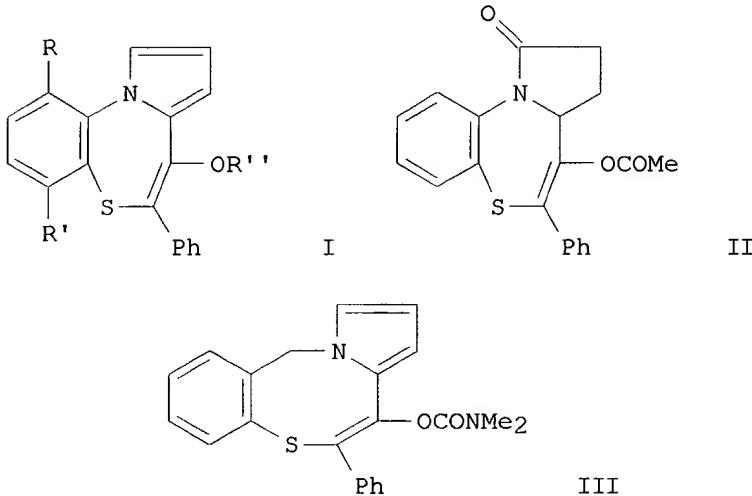
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and crystal structure of)

L11 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:275793 CAPLUS

DN 126:343549

TI New pyrrolobenzothiazepine derivatives as molecular probes of the "peripheral-type" benzodiazepine receptor (PBR) binding site
AU Campiani, G.; Nacci, V.; Fiorini, I.; De Filippis, M. P.; Garofalo, A.; Ciani, S. M.; Greco, G.; Novellino, E.; Manzoni, C.; Mennini, T.
CS Dipartimento Farmaco Chimico Tecnologico, Universita di Siena, Siena, 53100, Italy
SO Eur. J. Med. Chem. (1997), 32(3), 241-252
CODEN: EJMCA5; ISSN: 0223-5234
PB Elsevier
DT Journal
LA English
CC 28-22 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
GI



AB A no. of new pyrrolobenzothiazepine derivs. I [R = H, Me, Cl; R1 = H, Cl; R2 = CONEt₂, CO(CH₂)₅Me, COMe, etc.] and II and a pyrrolobenzothiazocine deriv. III have been synthesized and evaluated for their affinity towards the "peripheral-type" benzodiazepine receptor (PBR). The new compds.

were

tested in rat cortex, a tissue expressing a high d. of mitochondrial PBR. Some of the pyrrolobenzothiazepines exhibited IC₅₀ values in the low nanomolar range as measured by the displacement of [³H]PK 11195 binding. I (R = H, R1 = Cl, R2 = CONEt₂) was found to be the most potent ligand for

this receptor in the pyrrolobenzothiazepine subgroup with an IC₅₀ practically identical to that detd. for PK 11195. Structure-affinity relationships (SARs) have been developed to elucidate the topol. of the

ST PBR binding site.
pyrrolobenzothiazepine prepn benzodiazepine receptor binding;
benzothiazepine pyrrolo prepn benzodiazepine receptor binding; structure
activity pyrrolobenzothiazepine benzodiazepine receptor binding;
pyrrolobenzothiazocine prepn benzodiazepine receptor binding

IT Benzodiazepine receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(prepn. and benzodiazepine receptor binding activity of
pyrrolobenzothiazepines)

IT 156274-66-7P 189883-72-5P 189883-73-6P 189883-74-7P 189883-75-8P
189883-76-9P 189883-77-0P 189883-78-1P 189883-79-2P 189883-80-5P
189883-81-6P 189883-82-7P 189883-87-2P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and benzodiazepine receptor binding activity of
pyrrolobenzothiazepines)

IT 71-43-2, Benzene, reactions 79-44-7, Dimethylcarbamoyl chloride
88-10-8, Diethylcarbamoyl chloride 105-36-2, Ethyl bromoacetate
111-64-8, Octanoyl chloride 696-59-3, 2,5-Dimethoxytetrahydrofuran
1477-42-5 2528-61-2, Heptanoyl chloride 2719-27-9,

Cyclohexanecarbonyl
chloride 4870-65-9, .alpha.-Bromophenylacetic acid 15159-40-7,
4-Morpholinocarbonyl chloride 19009-39-3, Disopropylcarbamoyl chloride
19952-47-7 85725-90-2 99141-18-1 155908-94-4 189883-83-8
RL: RCT (Reactant)
(prepn. and benzodiazepine receptor binding activity of
pyrrolobenzothiazepines)

IT 156274-73-6P 156274-74-7P 156274-75-8P 156274-76-9P 177578-93-7P
189883-67-8P **189883-68-9P** 189883-69-0P 189883-70-3P
189883-71-4P 189883-84-9P 189883-85-0P 189883-86-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and benzodiazepine receptor binding activity of
pyrrolobenzothiazepines)

L11 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:228839 CAPLUS
DN 126:311761
TI A new class of anti-HIV-1 agents targeted toward the nucleocapsid protein
NCp7: the 2,2'-dithiobisbenzamides
AU Domagala, John M.; Bader, John P.; Gagliotti, Rocco D.; Sanchez, Joseph
P.; Stier, Michael A.; Song, Yuntao; Prasad, J.V.N. Vara; Tummino, Peter
J.; Scholten, Jeffrey; et al.
CS Division of Warner-Lambert Company, Departments of Chemistry and
Therapeutics, Parke-Davis Pharmaceutical Research, Ann Arbor, MI, 48105,
USA
SO Bioorg. Med. Chem. (1997), 5(3), 569-579
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier
DT Journal
LA English
CC 1-5 (Pharmacology)
Section cross-reference(s): 25
AB As part of the National Cancer Institute's Drug Screening Program, a new
class of antiretrovirals active against the human immunodeficiency virus
HIV-1 has been identified, and the HIV-1 nucleocapsid protein NCp7 was
proposed as the target of antiviral action. The 2,2'-dithiobis-[4'-
(sulfamoyl)benzanilide] and the 2,2'-dithiobis(5-acetylaminobenzamide
represented the prototypic lead structures. A wide variety of

2,2'-dithiobisbenzamides were prep'd. and tested for anti-HIV-1 activity, cytotoxicity, and their ability to extrude zinc from the zinc fingers for NCp7. The structure-activity relationships demonstrated that the ability to extrude zinc from NCp7 resided in the 2,2'-dithiobisbenzamide core structure. The 3,3' and the 4,4' isomers were inactive. While many analogs based upon the core structure retained the zinc extrusion activity, the best overall anti-HIV-1 activity was only found in a narrow set of derivs. possessing carboxylic acid, carboxamide, or phenylsulfonamide functional groups. These functional groups were more important for reducing cytotoxicity than improving antiviral potency or activity vs. NCp7. All of the compds. with antiviral activity also extruded zinc from NCp7. From this study several classes of low .mu.M anti-HIV agents with simple chem. structures were identified as possible chemotherapeutic agents for the treatment of AIDS.

| | |
|----|---|
| ST | nucleocapsid protein NCp7 HIV1 antiviral dithiobisbenzamide; dithiobisbenzamide prepn HIV1 virus inhibition structure; AIDS treatment dithiobisbenzamide nucleocapsid protein NCp7 |
| IT | Nucleocapsid proteins
RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (NC(p7) (nucleocapsid, p7); prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger) |
| IT | Anti-AIDS drugs
Antiviral agents
Human immunodeficiency virus 1
(prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger) |
| IT | 19602-82-5P, 2,2'-Dithiobisbenzoyl chloride 92906-21-3P 177785-53-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (intermediate; prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger) |
| IT | 2527-64-2P
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger) |
| IT | 119-80-2P 1160-68-5P 2527-57-3P 2527-58-4P 2527-59-5P
2527-60-8P
2527-62-0P 2527-63-1P 2634-30-2P 2634-31-3P 2752-93-4P
2752-94-5P 5459-63-2P 7765-77-7P 7765-79-9P 7765-80-2P
17407-52-2P 19602-83-6P 19602-85-8P 32276-24-7P 37010-19-8P
49755-40-0P 49755-44-4P 49755-48-8P 63956-06-9P 63956-08-1P
78010-07-8P 89011-97-2P 90520-54-0P 98051-90-2P 107920-19-4P
130752-42-0P 143467-53-2P 171744-39-1P 171744-40-4P 171744-41-5P
171744-43-7P 173590-72-2P 173590-73-3P 177785-55-6P 177785-58-9P
177785-92-1P 177786-17-3P 177786-20-8P 177786-24-2P 177786-28-6P
177786-33-3P 177786-38-8P 177786-41-3P 177786-44-6P 182149-25-3P
186130-50-7P 186130-65-4P 187872-00-0P 189367-79-1P 189367-80-4P
189367-81-5P 189367-82-6P 189367-83-7P 189367-84-8P 189367-85-9P
189367-86-0P 189367-87-1P 189367-88-2P 189367-89-3P
189367-90-6P 189367-91-7P 189367-92-8P 189367-93-9P 189367-94-0P
189367-98-4P |

RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger)

IT 7440-66-6, Zinc, biological studies

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger)

IT 63-74-1 75-64-9, tert-Butylamine, reactions 108-44-1,

3-Methylaniline,

reactions 443-79-8, (.+-.)-Isoleucine 769-92-6, 4-tert-Butylaniline 1155-51-7, 4,4'-Dithiobisbenzoic acid 1227-49-2 7298-84-2, L-Leucyl-L-alanine 16588-15-1, 2-Chloro-5-nitrobenzamide 16874-08-1, Isoleucine tert-butyl ester

RL: RCT (Reactant)

(reactant; prepn. of dithiobisbenzamides as new class of anti-HIV-1 agents targeted toward nucleocapsid protein NCp7 in relation to structure and extrusion of zinc from zinc finger)

L11 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:204498 CAPLUS

DN 126:205418

TI Thermal processing type silver halide photographic material containing a disulfide derivative

IN Okada, Hisashi; Totani, Ichizo; Kojima, Tetsuo

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 38 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C001-498

ICS G03C001-498

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|-------|-------|-------|-------|-------|
| ----- | ----- | ----- | ----- | ----- |
|-------|-------|-------|-------|-------|

PI JP 09005926 A2 19970110 JP 1996-85994 19960315 <--

PRAI JP 1995-115274 19950418

AB Claimed photog. material contains a disulfide compd. R1SSR2 (I; R1 = aryl,

pyridyl, quinolyl; R2 = aryl, pyridyl, quinolyl having substituent selected from aliph. hydrocarbon, aryl, amino, alkoxy, aryloxy,

acylamino,

carbamoyl, sulfonylamino, phosphonamido, sulfamoyl, alkylthio, arylthio, thiocarbonyl, sulfonyl, sulfinyl, ureide, thioureide, thioamido, OH, mercapto, sulfo, phosphono, hydroxamic acid residue, heterocyclic group).

Also claimed is the photog. material contg., in addn. to the compd. I, a polyhalomethane QYnC(X1)(X2)A (II; Q = aryl, heterocyclic group; X1, X2 = halo; Y = C(LO), SO₂, SO; A = H, halo, electron-attracting group; n = 0, 1). It has low fog, and provides an image with improved neutral color tone, and also has the stability of both before and after processing.

Suitable compd. II are bis(2-benzoamidophenyl)disulfide,

bis[4-(phenylaminocarbonyl)phenyl]disulfide, bis[2-

(phenylsulfoamino)phenyl]disulfide, etc., and suitable compd. II are

benzothiazol-2-yl-sulfonyl-dibromomethane, 2-(tribromomethylsulfonyl)-5-methyl-thiadiazole, etc. The additives are incorporated in the thermal processed type photog. material comprising Ag behenate, preformed Ag(Br, I) crystals, phthalazone, poly(vinyl butyral) binder, etc.

ST thermal processing type photog material; disulfide deriv additive photog material; aryl disulfide additive photog material; pyridyl disulfide additive photog material; polyhalomethane additive photog material

IT Photographic films
Photographic fog inhibitors
Photographic stabilizers
(thermal processing type silver halide photog. material contg.
disulfide deriv. to improve color tone and reduce fog)

IT 31183-89-8P, (2,2'-Diamino-5,5'-dichlorodiphenyl)disulfide
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation)
(disulfide compds. from; for thermal processing type silver halide photog. material)

IT 62-53-3, Aniline, reactions 75-36-5, Acetylchloride 85-46-1,
1-Naphthalenesulfonyl chloride 86-84-0, 1-Naphthylisocyanate 93-11-8,
2-Naphthalenesulfonyl chloride 95-24-9, 2-Amino-6-chlorobenzothiazole
98-09-9, Benzenesulfonyl chloride 98-59-9, p-Toluenesulfonyl chloride
98-68-0, p-Methoxybenzenesulfonyl chloride 98-88-4, Benzoyl chloride
103-71-9, Phenylisocyanate, reactions 119-80-2 121-44-8, reactions
356-42-3, Pentafluoropropionic anhydride 722-27-0, 4,4'-Dithiodianiline
773-64-8, 2-Mesitylenesulfonyl chloride 1141-88-4, 2,2'-Dithiodianiline
2243-83-6, 2-Naphthalenecarboxylic acid chloride 2251-50-5,
Pentafluorobenzoyl chloride 2524-64-3, Diphenylchlorophosphate
2536-91-6, 2-Amino-6-methylbenzothiazole 7719-09-7, Thionyl chloride
15945-07-0, 2,4,5-Trichlorobenzenesulfonyl chloride
RL: RCT (Reactant)
(disulfide compds. from; for thermal processing type silver halide photog. material)

IT 31274-42-7
RL: DEV (Device component use); USES (Uses)
(for thermal processing type silver halide photog. material)

IT 160029-59-4
RL: DEV (Device component use); USES (Uses)
(thermal processing type silver halide photog. material contg.
disulfide deriv. and halomethane deriv.)

IT 135-57-9 115484-15-6 **187744-17-8** 187744-19-0 187744-20-3
187744-21-4 187744-26-9 187744-28-1
RL: DEV (Device component use); USES (Uses)
(thermal processing type silver halide photog. material contg.
disulfide deriv. to improve color tone and reduce fog)

IT 3982-42-1P 4104-52-3P 4490-97-5P 4508-09-2P 14897-91-7P
16766-10-2P 52017-43-3P 69200-87-9P **187744-16-7P**
187744-18-9P 187744-22-5P 187744-23-6P 187744-24-7P 187744-25-8P
187744-27-0P 187744-29-2P 187744-30-5P 187744-31-6P 187744-32-7P
187744-33-8P
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(thermal processing type silver halide photog. material contg.
disulfide deriv. to improve color tone and reduce fog)

L11 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:183782 CAPLUS

DN 126:287661

TI Derivatives of 2-mercaptopbenzenesulfonamide. XIX. Syntheses, anticancer and anti-HIV activities of some 2-(4-chloro-2-

AU mercaptobenzenesulfonylimino)perhydropyrimidines
AU Pomarnacka, Elzbieta
CS Department of Chemical Drug Technology, Medical University of Gdansk,
Gdansk, 80-416, Pol.
SO Acta Pol. Pharm. (1996), 53(5), 373-378
CODEN: APPHAX; ISSN: 0001-6837
PB Polish Pharmaceutical Society
DT Journal
LA English
CC 1-6 (Pharmacology)
Section cross-reference(s): 28
AB Syntheses of some
2-(4-chloro-2-mercaptophenylsulfonylimino)perhydropyrimidine derivs. are described. The moderate anticancer and weak anti-HIV activities were obsd. in vitro for some of the compds.
ST mercaptobenzenesulfonamide deriv prepn anticancer antiviral HIV;
pyrimidine deriv prepn anticancer antiviral HIV
IT Antitumor agents
Antiviral agents
Human immunodeficiency virus 1
(prep. and anticancer and anti-HIV activities of 2-(4-chloro-2-mercaptophenylsulfonylimino)perhydropyrimidines)
IT 188717-79-5P 188717-81-9P 188717-83-1P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prep. and anticancer and anti-HIV activities of 2-(4-chloro-2-mercaptophenylsulfonylimino)perhydropyrimidines)
IT 95792-63-5P 156775-50-7P 189126-95-2P 189126-96-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prep. and anticancer and anti-HIV activities of 2-(4-chloro-2-mercaptophenylsulfonylimino)perhydropyrimidines)
IT 189126-97-4P 189126-98-5P 189126-99-6P 189127-01-3P 189127-02-4P
189127-03-5P **189127-04-6P** 189127-05-7P 189127-06-8P
189127-07-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. and anticancer and anti-HIV activities of 2-(4-chloro-2-mercaptophenylsulfonylimino)perhydropyrimidines)

L11 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1997:10653 CAPLUS
DN 126:117777
TI The "Thio-Arbuzov" reaction of sulfenate esters with sulphenyl chlorides: fate of the thiosulfinate product
AU Brown, Charles; Evans, Graham R.
CS Chem. Lab., Univ. Kent Canterbury, Canterbury, CT2 7NH, UK
SO Tetrahedron Lett. (1996), 37(50), 9101-9104
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier
DT Journal
LA English
CC 25-22 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
AB The further reaction of thiosulfinate esters (putative products of the thio-Arbuzov reaction of sulfenate esters with sulphenyl chlorides) with sulphenyl chlorides and sulfenate esters was studied. In the former case, sulfinyl chlorides and disulfides were formed. In the latter case sulfinate esters and disulfides were obtained. For example, the reaction of p-tolyl p-toluenethiosulfinate [i.e., 4-methylbenzenesulfinothioic acid

S-(4-methylphenyl) ester] with benzenesulfenyl chloride gave 4-methylbenzenesulfinyl chloride and a mixt. of disulfides, i.e., di-Ph disulfide, bis(4-methylphenyl)disulfide and (4-methylphenyl) Ph disulfide.

ST thio Arbuzov sulfenate sulfenyl chloride; benzenesulfenate thio Arbuzov reaction; benzenesulfinothioate thio Arbuzov reaction

IT Arbuzov reaction
(thio; thio-Arbuzov reaction between sulfenyl chlorides and benzenesulfinothioates)

IT 931-59-9, Benzenesulfenyl chloride 6481-73-8, p-Tolyl p-toluenethiosulfinate 67764-21-0, 4-Methylbenzenesulfenic acid methyl ester 77329-76-1 133773-41-8 186098-93-1 **186098-94-2**
186098-96-4
RL: RCT (Reactant)
(thio-Arbuzov reaction between sulfenyl chlorides and benzenesulfinothioates)

IT 103-19-5P, Bis(4-methylphenyl)disulfide 672-78-6P, Methyl p-toluenesulfinate 882-33-7P, Diphenyldisulfide 2943-20-6P,
tert-Butyl phenyl disulfide 4032-80-8P, Bis(2-methylphenyl)disulfide 10439-23-3P,
4-Methylbenzenesulfinyl chloride 16066-33-4P 20333-41-9P,
Bis(3-methylphenyl)disulfide 29627-34-7P, 4-Methylphenyl phenyl disulfide 57266-34-9P, Methyl 4-methylphenyl disulfide 63369-67-5P,
2-Methylbenzenesulfinyl chloride 83878-24-4P, 2-Methylphenyl phenyl disulfide 98147-48-9P 186098-95-3P **186098-97-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(thio-Arbuzov reaction between sulfenyl chlorides and benzenesulfinothioates)

=> end

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

| | SINCE FILE | TOTAL |
|---------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 113.17 | 211.27 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
|--|------------|---------|
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -13.01 | -13.01 |

STN INTERNATIONAL LOGOFF AT 10:57:20 ON 11 JAN 2002

L2 ANSWER 1 OF 6 MEDLINE
AN 2000097090 MEDLINE
DN 20097090
TI A small-molecule catalyst of protein folding in vitro and in vivo.
AU Woycechowsky K J; Wittrup K D; Raines R T
CS Department of Biochemistry, University of Wisconsin-Madison 53706, USA.
NC GM08505 (NIGMS)
SO CHEMISTRY AND BIOLOGY, (1999 Dec) 6 (12) 871-9.
Journal code: CNA. ISSN: 1074-5521.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200004
EW 20000402
AB BACKGROUND: The formation of native disulfide bonds between cysteine residues often limits the rate and yield of protein folding. The enzyme protein disulfide isomerase (PDI) catalyzes the interchange of disulfide bonds in substrate proteins. The two -Cys-Gly-His-Cys- active sites of PDI provide a thiol that has a low pKa value and a **disulfide** bond of high reduction potential ($E_{o'}$). RESULTS: A synthetic small-molecule dithiol, (+/-)-trans-1,2-bis(2-mercaptoacetamido)cyclohexane (BMC), has a pKa value of 8.3 and an $E_{o'}$ value of -0.24 V. These values are similar to those of the PDI active sites. BMC catalyzes the activation of scrambled ribonuclease A, an inactive enzyme with non-native disulfide bonds, and doubles the yield of active enzyme. A monothiol analog of BMC, N-methylmercaptoacetamide, is a less efficient catalyst than BMC. BMC in the growth medium of *Saccharomyces cerevisiae* cells increases by > threefold the heterologous secretion of *Schizosaccharomyces pombe* acid phosphatase, which has eight disulfide bonds. This effect is similar to that from the overproduction of PDI in the *S. cerevisiae* cells, indicating that BMC, like PDI, can catalyze protein folding in vivo. CONCLUSIONS: A small-molecule dithiol with a low thiol pKa value and high **disulfide** $E_{o'}$ value can mimic PDI by catalyzing the formation of native disulfide bonds in proteins, both in vitro and in vivo.